



April 30, 2014

Service Request No:J1402484

Karl Seltzer
Koogler and Associates, Inc.
4014 NW 13th Street
Gainesville, FL 32609-1923

Laboratory Results for: WasteAway Analysis

Dear Karl,

Enclosed are the results of the sample(s) submitted to our laboratory April 08, 2014
For your reference, these analyses have been assigned our service request number **J1402484**.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAP standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and ALS Environmental is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report. In accordance to the NELAC 2003 Standard, a statement on the estimated uncertainty of measurement of any quantitative analysis will be supplied upon request.

Please contact me if you have any questions. My extension is 4410. You may also contact me via email at Jerry.Allen@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

A handwritten signature in black ink, appearing to read "Jerry Allen". It is enclosed within a thin oval border.

Jerry Allen
Project Manager

ADDRESS 9143 Philips Highway, Suite 200, Jacksonville, FL 32256

PHONE +1 904 739 2277 | FAX +1 904 739 2011

ALS Group USA, Corp.

dba ALS Environmental



Client: Koogler and Associates, Inc.
Project: WasteAway Analysis/808-14-01
Sample Matrix: Misc. Solid

Service Request: J1402484
Date Received: 4/8/14

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples designated for Tier I data deliverables. When appropriate to the procedure, method blank results have been reported with each analytical test. Analytical procedures performed by the lab are validated in accordance with NELAC standards. Parameters that are included in the NELAC Fields of Testing but are not included in the lab's NELAC accreditation are identified in the discussion of each analytical procedure.

Sample Receipt

Two paperboard samples were received for analysis at ALS Environmental on 04/08/2014. The samples were received in good condition and consistent with the accompanying chain of custody form. Samples are refrigerated at $\leq 6^{\circ}\text{C}$ upon receipt at the lab except for aqueous samples designated for metals analyses, which are stored at room temperature.

Metals Analyses:

Method 6010: The Method Reporting Limit (MRL) for analyte(s) for sample(s) J1402484-1-7) was elevated due to less than ideal sample matrix for analysis.

The reporting limit is elevated for Mercury in sample(s) J1402484-(1-7). The sample(s) matrix contained excessive amounts of organic matter that subsequently reduced the potassium permanganate added during sample preparation. An excess of oxidized permanganate must be maintained throughout the prep process in order to ensure no loss of mercury as vapor. As a result, a lesser amount of sample was utilized and the resulting reporting limits adjusted accordingly.

Volatiles Analyses:

Method 8260B: The lower control criterion was exceeded for the following analyte in the Laboratory Control Sample Duplicate (LCSD) JQ1402932-02: Vinyl Chloride. The analyte in question was not detected in the associated field samples. Since the analyte was detected in the MRL check standard, instrument sensitivity was documented. The data quality was not significantly affected and no further corrective action was taken.

Method 8260B: The control criteria were exceeded for the following surrogate in samples WAW due to suspected matrix interferences: list surrogates: 4-Bromofluorobenzene. No further corrective action was appropriate.

The Relative Percent Difference (RPD) for the following analyte in the replicate Laboratory Control Sample (LCS) analyses (JQ1402932-01 and JQ1402932-02) was outside control criteria: Vinyl Chloride. Recovery in the Continuing Calibration Verification (CCV) and Laboratory Control Sample (LCS) was acceptable, which indicates the analytical batch was in control and no further corrective action was appropriate. The data is flagged to indicate the problem.

Semi Volatiles Analyses:

Method 8270: The control criteria for all the surrogate(s) in sample J1402484-001 – 007 are not applicable. The analysis of the sample required a dilution, which resulted in a surrogate concentration below the Method Reporting Limit (MRL). No further corrective action was appropriate.

8270: The Method Reporting Limit (MRL) is elevated for all target analytes in sample J1402484-001 - 007. The sample was

Approved by

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Date 4/30/2014



extracted using approximately 5g of sample instead of the usual 30g due to problems created by the sample matrix during extraction, filtration, and concentration.

Method 8270: The reporting limit is elevated for analyte(s) in sample(s) J1402484-001 - 007. The sample extract was diluted prior to instrumental analysis due to relatively high levels of non-target background components. The extract was highly colored and viscous, which indicated the need to perform a dilution prior to injection into the instrument.. The result(s) is/are flagged to indicate the matrix interference.

General Chemistry:

Method 9056: Samples J1402484-(4-7) were overrange for Fluoride. Data has been flagged and results should be considered estimated.

Method 9056: An unknown compound may be co-eluting with Fluoride in samples J1402484-(1-7) and cannot be separated. Fluoride results for these samples may be biased high.

Method 9056: The Method Reporting Limit (MRL) for analyte(s) for sample(s) J1402484-(1-7) was elevated due to high conductivity and matrix interference.

Method 9056: The upper control criterion was exceeded for the following analytes in the Continuing Calibration Verification (CCV): Bromide. The field samples analyzed in this sequence did not contain the analyte(s) in question above the Method Reporting Limit (MRL). Since the apparent problem equates to a potential high bias, the data quality was not significantly affected and no further corrective action was taken.

Method 9056: The upper control criterion was exceeded for Fluoride in the Continuing Calibration Verification (CCV) for samples J1402484-007. The field samples analyzed in this sequence contained the analyte(s) in question above the Method Reporting Limit (MRL). The apparent problem equates to a potential high bias, and therefore the associated sample results may also have a high bias.

Sub Contracted Analysis:

An aliquot of the samples were delivered to ALS in Rochester, NY for 8315 determination. The certified analytical report has been included in its entirety in this report.

An aliquot of the samples were delivered to ALS in Tucson, AZ for various determinations. The certified analytical report has been included in its entirety in Appendix A: Subcontracted Analytical Results.

Approved by

A handwritten signature in black ink, appearing to read "John" or "Johnson".

Date 4/30/2014



State Certifications, Accreditations, and Licenses

Agency	Number	Expire Date
Florida Department of Health	E82502	6/30/2014
North Carolina Department of Environment and Natural Resources	527	12/31/2014
Virginia Environmental Accreditation Program	460191	12/14/2014
Louisiana Department of Environmental Quality	02086	6/30/2014
Georgia Department of Natural Resources	958	6/30/2014
Kentucky Division of Waste Management	63	6/30/2014
South Carolina Department of Health and Environmental Control	96021001	6/30/2014
Texas Commission on Environmental Quality	T104704197-13-5	5/31/2014
Maine Department of Health and Human Services	2011006	2/3/2015
Department of Defense	66206	5/31/2014
Pennsylvania Department of Environmental Protection	68-04835	8/31/2014

Data Qualifiers

Florida-DEP

- ! Data deviates from historically established concentration ranges
- * Not reported due to interference
- ? Data is rejected and should not be used
- A Value reported is the arithmetic mean of two or more determinations
- B Results based upon colony counts outside the acceptable range.
- D Measurement was made in the field.
- E Extra samples were taken at composite stations
- H Value based on field kit determination; results may not be accurate.
- I The reported value is between the laboratory method detection limit and the laboratory PQL.
- J Estimated value.
- K Off scale low. The value is less than the lowest calibration standard.
- L Off scale high. The analyte is above the acceptable level of quantitation.
- M The MDL/MRL has been elevated because the analyte could not be accurately quantified.
- N Presumptive evidence of presence of material.
- O Sampled, but analysis lost or not performed
- Q Sample held beyond the acceptable holding time.
- R Significant rain in the past 48 hours (typically in excess of 0.5 inches)
- T Estimated value, less than the MDL
- U Indicates that the compound was analyzed for but not detected.
- V Indicates that the analyte was detected in both the sample and the associated method blank.
- X Insufficient individuals were present in the sample to achieve a minimum of 280 organisms for identification (Stream Condition Index Analysis only)
- Y The laboratory analysis was from an unpreserved or improperly preserved sample.
- Z Too many colonies were present, the numeric value represents the filtration volume

ALS Laboratory Group

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Client: Koogler and Associates, Inc.
Project: WasteAway Analysis/808-14-01

Service Request: J1402484

SAMPLE CROSS-REFERENCE

<u>SAMPLE #</u>	<u>CLIENT SAMPLE ID</u>	<u>DATE</u>	<u>TIME</u>
J1402484-001	WAW	3/17/2014	0000
J1402484-002	WAW	3/18/2014	0000
J1402484-003	WAW	3/19/2014	0000
J1402484-004	WAW	3/21/2014	0000
J1402484-005	WAW	3/24/2014	0000
J1402484-006	WAW	3/26/2014	0000
J1402484-007	WAW	3/27/2014	0000

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Analytical Report

Client:	Koogler and Associates, Inc.	Service Request:	J1402484
Project:	WasteAway Analysis/808-14-01	Date Collected:	03/17/14 00:00
Sample Matrix:	Misc. Solid	Date Received:	04/08/14 09:25
Sample Name:	WAW	Units:	ug/Kg
Lab Code:	J1402484-001	Basis:	As Received

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B
Prep Method: EPA 5035

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,1,2,2-Tetrachloroethane	1.84 U	40.0	1.84	1	04/21/14 22:04	4/18/14	*
1,1,2-Trichloroethane	3.12 U	40.0	3.12	1	04/21/14 22:04	4/18/14	*
1,2,4-Trichlorobenzene	1.04 U	79.9	1.04	1	04/21/14 22:04	4/18/14	*
1,4-Dichlorobenzene	0.800 U	40.0	0.800	1	04/21/14 22:04	4/18/14	*
Acetonitrile	24.8 U	799	24.8	1	04/21/14 22:04	4/18/14	*
Acrolein	55.2 U	799	55.2	1	04/21/14 22:04	4/18/14	*
Acrylonitrile	20.8 U	79.9	20.8	1	04/21/14 22:04	4/18/14	*
Allyl Chloride	2.88 U	79.9	2.88	1	04/21/14 22:04	4/18/14	*
Benzene	1.36 U	40.0	1.36	1	04/21/14 22:04	4/18/14	*
Bromoform	2.72 U	40.0	2.72	1	04/21/14 22:04	4/18/14	*
Chlorobenzene	1.12 U	40.0	1.12	1	04/21/14 22:04	4/18/14	*
Chloroform	11.7 I	40.0	1.44	1	04/21/14 22:04	4/18/14	*
Chloroprene	1.84 U	40.0	1.84	1	04/21/14 22:04	4/18/14	*
Ethylbenzene	7.35 I	40.0	0.960	1	04/21/14 22:04	4/18/14	*
Hexachlorobutadiene	1.84 U	79.9	1.84	1	04/21/14 22:04	4/18/14	*
Isopropylbenzene	6.15 I	40.0	1.12	1	04/21/14 22:04	4/18/14	*
m,p-Xylenes	11.4 I	79.9	1.68	1	04/21/14 22:04	4/18/14	*
Methyl Methacrylate	3.12 U	40.0	3.12	1	04/21/14 22:04	4/18/14	*
Methyl tert-Butyl Ether	2.08 U	40.0	2.08	1	04/21/14 22:04	4/18/14	*
Methylene Chloride	5.75 I	79.9	2.48	1	04/21/14 22:04	4/18/14	*
Naphthalene	573	79.9	1.76	1	04/21/14 22:04	4/18/14	*
n-Hexane	2.56 U	40.0	2.56	1	04/21/14 22:04	4/18/14	*
o-Xylene	7.11 I	40.0	1.28	1	04/21/14 22:04	4/18/14	*
Styrene	35.2 I	40.0	2.16	1	04/21/14 22:04	4/18/14	*
Tetrachloroethene (PCE)	2.00 U	40.0	2.00	1	04/21/14 22:04	4/18/14	*
Toluene	52.4	40.0	2.16	1	04/21/14 22:04	4/18/14	*
Vinyl Chloride	2.08 U	40.0	2.08	1	04/21/14 22:04	4/18/14	**

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	106	80 - 120	04/21/14 22:04	
4-Bromofluorobenzene	136	64 - 135	04/21/14 22:04	*
Dibromofluoromethane	111	74 - 125	04/21/14 22:04	
Toluene-d8	119	46 - 156	04/21/14 22:04	

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Analytical Report

Client:	Koogler and Associates, Inc.	Service Request:	J1402484
Project:	WasteAway Analysis/808-14-01	Date Collected:	03/17/14 00:00
Sample Matrix:	Misc. Solid	Date Received:	04/08/14 09:25
Sample Name:	WAW	Units:	ug/Kg
Lab Code:	J1402484-001	Basis:	As Received

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270C
Prep Method: EPA 3550C

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4-Trichlorobenzene	37100 U	100000	37100	10	04/22/14 12:33	4/16/14	
1,4-Dichlorobenzene	24200 U	100000	24200	10	04/22/14 12:33	4/16/14	
1-Methylnaphthalene	38900 U	100000	38900	10	04/22/14 12:33	4/16/14	
2,4,5-Trichlorophenol	33600 U	100000	33600	10	04/22/14 12:33	4/16/14	
2,4,6-Trichlorophenol	29500 U	100000	29500	10	04/22/14 12:33	4/16/14	
2,4-Dinitrophenol	13600 U	394000	13600	10	04/22/14 12:33	4/16/14	
2,4-Dinitrotoluene	24200 U	100000	24200	10	04/22/14 12:33	4/16/14	
2-Methylnaphthalene	34800 U	100000	34800	10	04/22/14 12:33	4/16/14	
3,3'-Dichlorobenzidine	50000 U	394000	50000	10	04/22/14 12:33	4/16/14	
4-Nitrophenol	33000 U	394000	33000	10	04/22/14 12:33	4/16/14	
Acenaphthene	31200 U	100000	31200	10	04/22/14 12:33	4/16/14	
Acenaphthylene	27700 U	100000	27700	10	04/22/14 12:33	4/16/14	
Acetophenone	27100 U	200000	27100	10	04/22/14 12:33	4/16/14	
Aniline	47100 U	100000	47100	10	04/22/14 12:33	4/16/14	
Anthracene	25300 U	100000	25300	10	04/22/14 12:33	4/16/14	
Benz(a)anthracene	27700 U	100000	27700	10	04/22/14 12:33	4/16/14	
Benzo(a)pyrene	21800 U	100000	21800	10	04/22/14 12:33	4/16/14	
Benzo(b)fluoranthene	15300 U	100000	15300	10	04/22/14 12:33	4/16/14	
Benzo(g,h,i)perylene	30600 U	100000	30600	10	04/22/14 12:33	4/16/14	
Benzo(k)fluoranthene	34800 U	100000	34800	10	04/22/14 12:33	4/16/14	
Biphenyl	24200 U	200000	24200	10	04/22/14 12:33	4/16/14	
Bis(2-ethylhexyl) Phthalate	470000	100000	25900	10	04/22/14 12:33	4/16/14	
Chrysene	26500 U	100000	26500	10	04/22/14 12:33	4/16/14	
Dibenz(a,h)anthracene	27100 U	100000	27100	10	04/22/14 12:33	4/16/14	
Dibenzofuran	27100 U	100000	27100	10	04/22/14 12:33	4/16/14	
Dimethyl Phthalate	31200 U	100000	31200	10	04/22/14 12:33	4/16/14	
Fluoranthene	28300 U	100000	28300	10	04/22/14 12:33	4/16/14	
Fluorene	27700 U	100000	27700	10	04/22/14 12:33	4/16/14	
Hexachlorobenzene	28300 U	100000	28300	10	04/22/14 12:33	4/16/14	
Hexachlorobutadiene	32400 U	100000	32400	10	04/22/14 12:33	4/16/14	
Hexachlorocyclopentadiene	20000 U	100000	20000	10	04/22/14 12:33	4/16/14	
Hexachloroethane	18300 U	100000	18300	10	04/22/14 12:33	4/16/14	
Indeno(1,2,3-cd)pyrene	24200 U	100000	24200	10	04/22/14 12:33	4/16/14	
Naphthalene	28900 U	100000	28900	10	04/22/14 12:33	4/16/14	
Nitrobenzene	23000 U	100000	23000	10	04/22/14 12:33	4/16/14	
Pentachlorophenol (PCP)	20600 U	394000	20600	10	04/22/14 12:33	4/16/14	
Phenanthrene	24800 U	100000	24800	10	04/22/14 12:33	4/16/14	
Phenol	27100 U	100000	27100	10	04/22/14 12:33	4/16/14	
Pyrene	27100 U	100000	27100	10	04/22/14 12:33	4/16/14	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	3	28 - 164	04/22/14 12:33	*

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Analytical Report

Client: Koogler and Associates, Inc.
Project: WasteAway Analysis/808-14-01
Sample Matrix: Misc. Solid

Sample Name: WAW
Lab Code: J1402484-001

Service Request: J1402484
Date Collected: 03/17/14 00:00
Date Received: 04/08/14 09:25

Units: ug/Kg
Basis: As Received

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270C
Prep Method: EPA 3550C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2-Fluorobiphenyl	35	33 - 133	04/22/14 12:33	
2-Fluorophenol	8	10 - 126	04/22/14 12:33	*
Nitrobenzene-d5	20	25 - 138	04/22/14 12:33	*
Phenol-d6	18	10 - 170	04/22/14 12:33	
p-Terphenyl-d14	35	16 - 168	04/22/14 12:33	

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Analytical Report

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Sample Matrix: Misc. Solid

Service Request: J1402484
Date Collected: 03/17/14 00:00
Date Received: 04/08/14 09:25

Sample Name: WAW
Lab Code: J1402484-001

Units: ug/Kg
Basis: As Received

Carbonyl Compounds by High Performance Liquid Chromatography (HPLC)

Analysis Method: 8315A
Prep Method: Method

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Formaldehyde	3500	1600	420	1	04/17/14 19:59	4/16/14	

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Analytical Report

Client:	Koogler and Associates, Inc.	Service Request:	J1402484
Project:	WasteAway Analysis/808-14-01	Date Collected:	03/17/14 00:00
Sample Matrix:	Misc. Solid	Date Received:	04/08/14 09:25
Sample Name:	WAW	Basis:	As Received
Lab Code:	J1402484-001		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	PQL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Antimony, Total Recoverable	6010B	42.4	mg/Kg	0.96	0.15	1	04/17/14 20:59	04/17/14	
Arsenic, Total Recoverable	6010B	2.02	mg/Kg	0.96	0.23	1	04/17/14 20:59	04/17/14	
Beryllium, Total Recoverable	6010B	0.10 I	mg/Kg	0.38	0.02	1	04/17/14 20:59	04/17/14	
Cadmium, Total Recoverable	6010B	1.25	mg/Kg	0.48	0.02	1	04/17/14 20:59	04/17/14	
Chromium, Total Recoverable	6010B	37.3	mg/Kg	0.96	0.04	1	04/17/14 20:59	04/17/14	
Cobalt, Total Recoverable	6010B	7.79	mg/Kg	0.96	0.08	1	04/17/14 20:59	04/17/14	
Lead, Total Recoverable	6010B	80.3	mg/Kg	0.96	0.25	1	04/17/14 20:59	04/17/14	
Manganese, Total Recoverable	6010B	140	mg/Kg	0.96	0.02	1	04/17/14 20:59	04/17/14	
Mercury, Total	7471B	0.127	mg/Kg	0.015	0.003	1	04/18/14 15:20	04/17/14	*
Nickel, Total Recoverable	6010B	11.4	mg/Kg	0.96	0.07	1	04/17/14 20:59	04/17/14	
Selenium, Total Recoverable	6010B	0.52 U	mg/Kg	0.96	0.52	1	04/17/14 20:59	04/17/14	

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Analytical Report

Client: Koogler and Associates, Inc.
Project: WasteAway Analysis/808-14-01
Sample Matrix: Misc. Solid

Sample Name: WAW
Lab Code: J1402484-001

Service Request: J1402484
Date Collected: 03/17/14 00:00
Date Received: 04/08/14 09:25

Basis: As Received

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	PQL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Bromide	9056	3 U	mg/Kg	19	3	10	04/30/14 03:45	04/29/14	*
Chloride	9056	3070	mg/Kg	97	16	10	04/30/14 03:45	04/29/14	*
Fluoride	9056	656 J	mg/Kg	19	3	10	04/30/14 03:45	04/29/14	*

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Analytical Report

Client:	Koogler and Associates, Inc.	Service Request:	J1402484
Project:	WasteAway Analysis/808-14-01	Date Collected:	03/18/14 00:00
Sample Matrix:	Misc. Solid	Date Received:	04/08/14 09:25
Sample Name:	WAW	Units:	ug/Kg
Lab Code:	J1402484-002	Basis:	As Received

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B
Prep Method: EPA 5035

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,1,2,2-Tetrachloroethane	1.80 U	39.1	1.80	1	04/21/14 22:30	4/18/14	*
1,1,2-Trichloroethane	3.06 U	39.1	3.06	1	04/21/14 22:30	4/18/14	*
1,2,4-Trichlorobenzene	1.02 U	78.2	1.02	1	04/21/14 22:30	4/18/14	*
1,4-Dichlorobenzene	0.783 U	39.1	0.783	1	04/21/14 22:30	4/18/14	*
Acetonitrile	24.3 U	782	24.3	1	04/21/14 22:30	4/18/14	*
Acrolein	54.0 U	782	54.0	1	04/21/14 22:30	4/18/14	*
Acrylonitrile	20.4 U	78.2	20.4	1	04/21/14 22:30	4/18/14	*
Allyl Chloride	2.82 U	78.2	2.82	1	04/21/14 22:30	4/18/14	*
Benzene	1.33 U	39.1	1.33	1	04/21/14 22:30	4/18/14	*
Bromoform	2.66 U	39.1	2.66	1	04/21/14 22:30	4/18/14	*
Chlorobenzene	1.10 U	39.1	1.10	1	04/21/14 22:30	4/18/14	*
Chloroform	15.6 I	39.1	1.41	1	04/21/14 22:30	4/18/14	*
Chloroprene	1.80 U	39.1	1.80	1	04/21/14 22:30	4/18/14	*
Ethylbenzene	5.87 I	39.1	0.939	1	04/21/14 22:30	4/18/14	*
Hexachlorobutadiene	1.80 U	78.2	1.80	1	04/21/14 22:30	4/18/14	*
Isopropylbenzene	4.46 I	39.1	1.10	1	04/21/14 22:30	4/18/14	*
m,p-Xylenes	9.78 I	78.2	1.65	1	04/21/14 22:30	4/18/14	*
Methyl Methacrylate	3.06 U	39.1	3.06	1	04/21/14 22:30	4/18/14	*
Methyl tert-Butyl Ether	2.04 U	39.1	2.04	1	04/21/14 22:30	4/18/14	*
Methylene Chloride	15.3 I	78.2	2.43	1	04/21/14 22:30	4/18/14	*
Naphthalene	633	78.2	1.73	1	04/21/14 22:30	4/18/14	*
n-Hexane	7.35 I	39.1	2.51	1	04/21/14 22:30	4/18/14	*
o-Xylene	5.24 I	39.1	1.26	1	04/21/14 22:30	4/18/14	*
Styrene	27.2 I	39.1	2.12	1	04/21/14 22:30	4/18/14	*
Tetrachloroethene (PCE)	1.96 U	39.1	1.96	1	04/21/14 22:30	4/18/14	*
Toluene	52.0	39.1	2.12	1	04/21/14 22:30	4/18/14	*
Vinyl Chloride	2.04 U	39.1	2.04	1	04/21/14 22:30	4/18/14	**

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	106	80 - 120	04/21/14 22:30	
4-Bromofluorobenzene	136	64 - 135	04/21/14 22:30	*
Dibromofluoromethane	108	74 - 125	04/21/14 22:30	
Toluene-d8	115	46 - 156	04/21/14 22:30	

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Analytical Report

Client:	Koogler and Associates, Inc.	Service Request:	J1402484
Project:	WasteAway Analysis/808-14-01	Date Collected:	03/18/14 00:00
Sample Matrix:	Misc. Solid	Date Received:	04/08/14 09:25
Sample Name:	WAW	Units:	ug/Kg
Lab Code:	J1402484-002	Basis:	As Received

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270C
Prep Method: EPA 3550C

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4-Trichlorobenzene	35000 U	94400	35000	10	04/23/14 20:23	4/16/14	
1,4-Dichlorobenzene	22800 U	94400	22800	10	04/23/14 20:23	4/16/14	
1-Methylnaphthalene	36700 U	94400	36700	10	04/23/14 20:23	4/16/14	
2,4,5-Trichlorophenol	31700 U	94400	31700	10	04/23/14 20:23	4/16/14	
2,4,6-Trichlorophenol	27800 U	94400	27800	10	04/23/14 20:23	4/16/14	
2,4-Dinitrophenol	12800 U	372000	12800	10	04/23/14 20:23	4/16/14	
2,4-Dinitrotoluene	22800 U	94400	22800	10	04/23/14 20:23	4/16/14	
2-Methylnaphthalene	32800 U	94400	32800	10	04/23/14 20:23	4/16/14	
3,3'-Dichlorobenzidine	47300 U	372000	47300	10	04/23/14 20:23	4/16/14	
4-Nitrophenol	31200 U	372000	31200	10	04/23/14 20:23	4/16/14	
Acenaphthene	29500 U	94400	29500	10	04/23/14 20:23	4/16/14	
Acenaphthylene	26200 U	94400	26200	10	04/23/14 20:23	4/16/14	
Acetophenone	25600 U	189000	25600	10	04/23/14 20:23	4/16/14	
Aniline	44500 U	94400	44500	10	04/23/14 20:23	4/16/14	
Anthracene	23900 U	94400	23900	10	04/23/14 20:23	4/16/14	
Benz(a)anthracene	26200 U	94400	26200	10	04/23/14 20:23	4/16/14	
Benzo(a)pyrene	20600 U	94400	20600	10	04/23/14 20:23	4/16/14	
Benzo(b)fluoranthene	14500 U	94400	14500	10	04/23/14 20:23	4/16/14	
Benzo(g,h,i)perylene	28900 U	94400	28900	10	04/23/14 20:23	4/16/14	
Benzo(k)fluoranthene	32800 U	94400	32800	10	04/23/14 20:23	4/16/14	
Biphenyl	22800 U	189000	22800	10	04/23/14 20:23	4/16/14	
Bis(2-ethylhexyl) Phthalate	448000	94400	24500	10	04/23/14 20:23	4/16/14	
Chrysene	25000 U	94400	25000	10	04/23/14 20:23	4/16/14	
Dibenz(a,h)anthracene	25600 U	94400	25600	10	04/23/14 20:23	4/16/14	
Dibenzofuran	25600 U	94400	25600	10	04/23/14 20:23	4/16/14	
Dimethyl Phthalate	29500 U	94400	29500	10	04/23/14 20:23	4/16/14	
Fluoranthene	26700 U	94400	26700	10	04/23/14 20:23	4/16/14	
Fluorene	26200 U	94400	26200	10	04/23/14 20:23	4/16/14	
Hexachlorobenzene	26700 U	94400	26700	10	04/23/14 20:23	4/16/14	
Hexachlorobutadiene	30600 U	94400	30600	10	04/23/14 20:23	4/16/14	
Hexachlorocyclopentadiene	18900 U	94400	18900	10	04/23/14 20:23	4/16/14	
Hexachloroethane	17300 U	94400	17300	10	04/23/14 20:23	4/16/14	
Indeno(1,2,3-cd)pyrene	22800 U	94400	22800	10	04/23/14 20:23	4/16/14	
Naphthalene	27300 U	94400	27300	10	04/23/14 20:23	4/16/14	
Nitrobenzene	21700 U	94400	21700	10	04/23/14 20:23	4/16/14	
Pentachlorophenol (PCP)	19500 U	372000	19500	10	04/23/14 20:23	4/16/14	
Phenanthrene	23400 U	94400	23400	10	04/23/14 20:23	4/16/14	
Phenol	25600 U	94400	25600	10	04/23/14 20:23	4/16/14	
Pyrene	25600 U	94400	25600	10	04/23/14 20:23	4/16/14	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	0	28 - 164	04/23/14 20:23	*

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Analytical Report

Client: Koogler and Associates, Inc.
Project: WasteAway Analysis/808-14-01
Sample Matrix: Misc. Solid

Sample Name: WAW
Lab Code: J1402484-002

Service Request: J1402484
Date Collected: 03/18/14 00:00
Date Received: 04/08/14 09:25

Units: ug/Kg
Basis: As Received

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270C
Prep Method: EPA 3550C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2-Fluorobiphenyl	45	33 - 133	04/23/14 20:23	
2-Fluorophenol	5	10 - 126	04/23/14 20:23	*
Nitrobenzene-d5	18	25 - 138	04/23/14 20:23	*
Phenol-d6	23	10 - 170	04/23/14 20:23	
p-Terphenyl-d14	40	16 - 168	04/23/14 20:23	

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Analytical Report

Client: Koogler and Associates, Inc.
Project: WasteAway Analysis/808-14-01
Sample Matrix: Misc. Solid

Service Request: J1402484
Date Collected: 03/18/14 00:00
Date Received: 04/08/14 09:25

Sample Name: WAW
Lab Code: J1402484-002

Units: ug/Kg
Basis: As Received

Carbonyl Compounds by High Performance Liquid Chromatography (HPLC)

Analysis Method: 8315A
Prep Method: Method

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Formaldehyde	3100	1600	420	1	04/17/14 20:42	4/16/14	

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Analytical Report

Client:	Koogler and Associates, Inc.	Service Request:	J1402484
Project:	WasteAway Analysis/808-14-01	Date Collected:	03/18/14 00:00
Sample Matrix:	Misc. Solid	Date Received:	04/08/14 09:25
Sample Name:	WAW	Basis:	As Received
Lab Code:	J1402484-002		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	PQL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Antimony, Total Recoverable	6010B	45.2	mg/Kg	1.0	0.2	1	04/17/14 21:03	04/17/14	
Arsenic, Total Recoverable	6010B	2.5	mg/Kg	1.0	0.3	1	04/17/14 21:03	04/17/14	
Beryllium, Total Recoverable	6010B	0.02 U	mg/Kg	0.42	0.02	1	04/17/14 21:03	04/17/14	
Cadmium, Total Recoverable	6010B	0.83	mg/Kg	0.52	0.02	1	04/17/14 21:03	04/17/14	
Chromium, Total Recoverable	6010B	44.6	mg/Kg	1.0	0.04	1	04/17/14 21:03	04/17/14	
Cobalt, Total Recoverable	6010B	9.8	mg/Kg	1.0	0.09	1	04/17/14 21:03	04/17/14	
Lead, Total Recoverable	6010B	88.6	mg/Kg	1.0	0.3	1	04/17/14 21:03	04/17/14	
Manganese, Total Recoverable	6010B	127	mg/Kg	1.0	0.02	1	04/17/14 21:03	04/17/14	
Mercury, Total	7471B	0.119	mg/Kg	0.017	0.003	1	04/18/14 15:21	04/17/14	*
Nickel, Total Recoverable	6010B	8.6	mg/Kg	1.0	0.07	1	04/17/14 21:03	04/17/14	
Selenium, Total Recoverable	6010B	0.6 U	mg/Kg	1.0	0.6	1	04/17/14 21:03	04/17/14	

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Analytical Report

Client: Koogler and Associates, Inc.
Project: WasteAway Analysis/808-14-01
Sample Matrix: Misc. Solid

Sample Name: WAW
Lab Code: J1402484-002

Service Request: J1402484
Date Collected: 03/18/14 00:00
Date Received: 04/08/14 09:25

Basis: As Received

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	PQL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Bromide	9056	11 I	mg/Kg	20	3	10	04/30/14 04:33	04/29/14	*
Chloride	9056	2980	mg/Kg	100	20	10	04/30/14 04:33	04/29/14	*
Fluoride	9056	584 J	mg/Kg	20	3	10	04/30/14 04:33	04/29/14	*

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Analytical Report

Client:	Koogler and Associates, Inc.	Service Request:	J1402484
Project:	WasteAway Analysis/808-14-01	Date Collected:	03/19/14 00:00
Sample Matrix:	Misc. Solid	Date Received:	04/08/14 09:25
Sample Name:	WAW	Units:	ug/Kg
Lab Code:	J1402484-003	Basis:	As Received

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B
Prep Method: EPA 5035

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,1,2,2-Tetrachloroethane	2.55 U	55.3	2.55	1	04/21/14 22:55	4/18/14	*
1,1,2-Trichloroethane	4.32 U	55.3	4.32	1	04/21/14 22:55	4/18/14	*
1,2,4-Trichlorobenzene	6.19 I	111	1.44	1	04/21/14 22:55	4/18/14	*
1,4-Dichlorobenzene	1.11 U	55.3	1.11	1	04/21/14 22:55	4/18/14	*
Acetonitrile	34.3 U	1110	34.3	1	04/21/14 22:55	4/18/14	*
Acrolein	76.3 U	1110	76.3	1	04/21/14 22:55	4/18/14	*
Acrylonitrile	28.8 U	111	28.8	1	04/21/14 22:55	4/18/14	*
Allyl Chloride	3.98 U	111	3.98	1	04/21/14 22:55	4/18/14	*
Benzene	1.88 U	55.3	1.88	1	04/21/14 22:55	4/18/14	*
Bromoform	3.76 U	55.3	3.76	1	04/21/14 22:55	4/18/14	*
Chlorobenzene	1.55 U	55.3	1.55	1	04/21/14 22:55	4/18/14	*
Chloroform	37.1 I	55.3	1.99	1	04/21/14 22:55	4/18/14	*
Chloroprene	2.55 U	55.3	2.55	1	04/21/14 22:55	4/18/14	*
Ethylbenzene	9.18 I	55.3	1.33	1	04/21/14 22:55	4/18/14	*
Hexachlorobutadiene	2.55 U	111	2.55	1	04/21/14 22:55	4/18/14	*
Isopropylbenzene	1.55 U	55.3	1.55	1	04/21/14 22:55	4/18/14	*
m,p-Xylenes	11.8 I	111	2.33	1	04/21/14 22:55	4/18/14	*
Methyl Methacrylate	4.32 U	55.3	4.32	1	04/21/14 22:55	4/18/14	*
Methyl tert-Butyl Ether	2.88 U	55.3	2.88	1	04/21/14 22:55	4/18/14	*
Methylene Chloride	3.43 U	111	3.43	1	04/21/14 22:55	4/18/14	*
Naphthalene	852	111	2.44	1	04/21/14 22:55	4/18/14	*
n-Hexane	3.54 U	55.3	3.54	1	04/21/14 22:55	4/18/14	*
o-Xylene	6.63 I	55.3	1.77	1	04/21/14 22:55	4/18/14	*
Styrene	41.1 I	55.3	2.99	1	04/21/14 22:55	4/18/14	*
Tetrachloroethene (PCE)	5.53 I	55.3	2.77	1	04/21/14 22:55	4/18/14	*
Toluene	47.0 I	55.3	2.99	1	04/21/14 22:55	4/18/14	*
Vinyl Chloride	2.88 U	55.3	2.88	1	04/21/14 22:55	4/18/14	**

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	97	80 - 120	04/21/14 22:55	
4-Bromofluorobenzene	137	64 - 135	04/21/14 22:55	*
Dibromofluoromethane	106	74 - 125	04/21/14 22:55	
Toluene-d8	123	46 - 156	04/21/14 22:55	

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Analytical Report

Client:	Koogler and Associates, Inc.	Service Request:	J1402484
Project:	WasteAway Analysis/808-14-01	Date Collected:	03/19/14 00:00
Sample Matrix:	Misc. Solid	Date Received:	04/08/14 09:25
Sample Name:	WAW	Units:	ug/Kg
Lab Code:	J1402484-003	Basis:	As Received

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270C
Prep Method: EPA 3550C

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4-Trichlorobenzene	35000 U	94400	35000	10	04/22/14 01:47	4/16/14	
1,4-Dichlorobenzene	22800 U	94400	22800	10	04/22/14 01:47	4/16/14	
1-Methylnaphthalene	36700 U	94400	36700	10	04/22/14 01:47	4/16/14	
2,4,5-Trichlorophenol	31700 U	94400	31700	10	04/22/14 01:47	4/16/14	
2,4,6-Trichlorophenol	27800 U	94400	27800	10	04/22/14 01:47	4/16/14	
2,4-Dinitrophenol	12800 U	372000	12800	10	04/22/14 01:47	4/16/14	
2,4-Dinitrotoluene	22800 U	94400	22800	10	04/22/14 01:47	4/16/14	
2-Methylnaphthalene	32800 U	94400	32800	10	04/22/14 01:47	4/16/14	
3,3'-Dichlorobenzidine	47300 U	372000	47300	10	04/22/14 01:47	4/16/14	
4-Nitrophenol	31200 U	372000	31200	10	04/22/14 01:47	4/16/14	
Acenaphthene	29500 U	94400	29500	10	04/22/14 01:47	4/16/14	
Acenaphthylene	26200 U	94400	26200	10	04/22/14 01:47	4/16/14	
Acetophenone	25600 U	189000	25600	10	04/22/14 01:47	4/16/14	
Aniline	44500 U	94400	44500	10	04/22/14 01:47	4/16/14	
Anthracene	23900 U	94400	23900	10	04/22/14 01:47	4/16/14	
Benz(a)anthracene	26200 U	94400	26200	10	04/22/14 01:47	4/16/14	
Benzo(a)pyrene	20600 U	94400	20600	10	04/22/14 01:47	4/16/14	
Benzo(b)fluoranthene	14500 U	94400	14500	10	04/22/14 01:47	4/16/14	
Benzo(g,h,i)perylene	28900 U	94400	28900	10	04/22/14 01:47	4/16/14	
Benzo(k)fluoranthene	32800 U	94400	32800	10	04/22/14 01:47	4/16/14	
Biphenyl	22800 U	189000	22800	10	04/22/14 01:47	4/16/14	
Bis(2-ethylhexyl) Phthalate	548000	94400	24500	10	04/22/14 01:47	4/16/14	
Chrysene	25000 U	94400	25000	10	04/22/14 01:47	4/16/14	
Dibenz(a,h)anthracene	25600 U	94400	25600	10	04/22/14 01:47	4/16/14	
Dibenzofuran	25600 U	94400	25600	10	04/22/14 01:47	4/16/14	
Dimethyl Phthalate	29500 U	94400	29500	10	04/22/14 01:47	4/16/14	
Fluoranthene	26700 U	94400	26700	10	04/22/14 01:47	4/16/14	
Fluorene	26200 U	94400	26200	10	04/22/14 01:47	4/16/14	
Hexachlorobenzene	26700 U	94400	26700	10	04/22/14 01:47	4/16/14	
Hexachlorobutadiene	30600 U	94400	30600	10	04/22/14 01:47	4/16/14	
Hexachlorocyclopentadiene	18900 U	94400	18900	10	04/22/14 01:47	4/16/14	
Hexachloroethane	17300 U	94400	17300	10	04/22/14 01:47	4/16/14	
Indeno(1,2,3-cd)pyrene	22800 U	94400	22800	10	04/22/14 01:47	4/16/14	
Naphthalene	27300 U	94400	27300	10	04/22/14 01:47	4/16/14	
Nitrobenzene	21700 U	94400	21700	10	04/22/14 01:47	4/16/14	
Pentachlorophenol (PCP)	19500 U	372000	19500	10	04/22/14 01:47	4/16/14	
Phenanthrene	23400 U	94400	23400	10	04/22/14 01:47	4/16/14	
Phenol	25600 U	94400	25600	10	04/22/14 01:47	4/16/14	
Pyrene	25600 U	94400	25600	10	04/22/14 01:47	4/16/14	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	10	28 - 164	04/22/14 01:47	*

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Analytical Report

Client: Koogler and Associates, Inc.
Project: WasteAway Analysis/808-14-01
Sample Matrix: Misc. Solid

Sample Name: WAW
Lab Code: J1402484-003

Service Request: J1402484
Date Collected: 03/19/14 00:00
Date Received: 04/08/14 09:25

Units: ug/Kg
Basis: As Received

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270C
Prep Method: EPA 3550C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2-Fluorobiphenyl	42	33 - 133	04/22/14 01:47	
2-Fluorophenol	15	10 - 126	04/22/14 01:47	
Nitrobenzene-d5	23	25 - 138	04/22/14 01:47	*
Phenol-d6	20	10 - 170	04/22/14 01:47	
p-Terphenyl-d14	45	16 - 168	04/22/14 01:47	

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Analytical Report

Client: Koogler and Associates, Inc.
Project: WasteAway Analysis/808-14-01
Sample Matrix: Misc. Solid

Sample Name: WAW
Lab Code: J1402484-003

Service Request: J1402484
Date Collected: 03/19/14 00:00
Date Received: 04/08/14 09:25

Units: ug/Kg
Basis: As Received

Carbonyl Compounds by High Performance Liquid Chromatography (HPLC)

Analysis Method: 8315A
Prep Method: Method

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Formaldehyde	7900	1600	420	1	04/17/14 21:03	4/16/14	

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Analytical Report

Client:	Koogler and Associates, Inc.	Service Request:	J1402484
Project:	WasteAway Analysis/808-14-01	Date Collected:	03/19/14 00:00
Sample Matrix:	Misc. Solid	Date Received:	04/08/14 09:25
Sample Name:	WAW	Basis:	As Received
Lab Code:	J1402484-003		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	PQL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Antimony, Total Recoverable	6010B	35.7	mg/Kg	0.96	0.15	1	04/17/14 21:15	04/17/14	
Arsenic, Total Recoverable	6010B	1.83	mg/Kg	0.96	0.23	1	04/17/14 21:15	04/17/14	
Beryllium, Total Recoverable	6010B	0.10 I	mg/Kg	0.38	0.02	1	04/17/14 21:15	04/17/14	
Cadmium, Total Recoverable	6010B	1.25	mg/Kg	0.48	0.02	1	04/17/14 21:15	04/17/14	
Chromium, Total Recoverable	6010B	33.2	mg/Kg	0.96	0.04	1	04/17/14 21:15	04/17/14	
Cobalt, Total Recoverable	6010B	8.27	mg/Kg	0.96	0.08	1	04/17/14 21:15	04/17/14	
Lead, Total Recoverable	6010B	124	mg/Kg	0.96	0.25	1	04/17/14 21:15	04/17/14	
Manganese, Total Recoverable	6010B	118	mg/Kg	0.96	0.02	1	04/17/14 21:15	04/17/14	
Mercury, Total	7471B	0.114	mg/Kg	0.015	0.003	1	04/18/14 15:23	04/17/14	*
Nickel, Total Recoverable	6010B	12.7	mg/Kg	0.96	0.07	1	04/17/14 21:15	04/17/14	
Selenium, Total Recoverable	6010B	0.52 U	mg/Kg	0.96	0.52	1	04/17/14 21:15	04/17/14	

ALS Group USA, Corp.
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Analytical Report

Client: Koogler and Associates, Inc.
Project: WasteAway Analysis/808-14-01
Sample Matrix: Misc. Solid

Sample Name: WAW
Lab Code: J1402484-003

Service Request: J1402484
Date Collected: 03/19/14 00:00
Date Received: 04/08/14 09:25

Basis: As Received

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	PQL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Bromide	9056	8 I	mg/Kg	19	3	10	04/30/14 04:49	04/29/14	*
Chloride	9056	3180	mg/Kg	97	16	10	04/30/14 04:49	04/29/14	*
Fluoride	9056	782 J	mg/Kg	19	3	10	04/30/14 04:49	04/29/14	*

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Analytical Report

Client:	Koogler and Associates, Inc.	Service Request:	J1402484
Project:	WasteAway Analysis/808-14-01	Date Collected:	03/21/14 00:00
Sample Matrix:	Misc. Solid	Date Received:	04/08/14 09:25
Sample Name:	WAW	Units:	ug/Kg
Lab Code:	J1402484-004	Basis:	As Received

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B
Prep Method: EPA 5035

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,1,2,2-Tetrachloroethane	2.37 U	51.4	2.37	1	04/21/14 23:20	4/18/14	*
1,1,2-Trichloroethane	4.02 U	51.4	4.02	1	04/21/14 23:20	4/18/14	*
1,2,4-Trichlorobenzene	5.76 I	103	1.34	1	04/21/14 23:20	4/18/14	*
1,4-Dichlorobenzene	1.03 U	51.4	1.03	1	04/21/14 23:20	4/18/14	*
Acetonitrile	31.9 U	1030	31.9	1	04/21/14 23:20	4/18/14	*
Acrolein	71.0 U	1030	71.0	1	04/21/14 23:20	4/18/14	*
Acrylonitrile	26.8 U	103	26.8	1	04/21/14 23:20	4/18/14	*
Allyl Chloride	3.71 U	103	3.71	1	04/21/14 23:20	4/18/14	*
Benzene	1.75 U	51.4	1.75	1	04/21/14 23:20	4/18/14	*
Bromoform	3.50 U	51.4	3.50	1	04/21/14 23:20	4/18/14	*
Chlorobenzene	1.45 U	51.4	1.45	1	04/21/14 23:20	4/18/14	*
Chloroform	32.5 I	51.4	1.86	1	04/21/14 23:20	4/18/14	*
Chloroprene	2.37 U	51.4	2.37	1	04/21/14 23:20	4/18/14	*
Ethylbenzene	8.85 I	51.4	1.24	1	04/21/14 23:20	4/18/14	*
Hexachlorobutadiene	2.37 U	103	2.37	1	04/21/14 23:20	4/18/14	*
Isopropylbenzene	1.45 U	51.4	1.45	1	04/21/14 23:20	4/18/14	*
m,p-Xylenes	11.7 I	103	2.17	1	04/21/14 23:20	4/18/14	*
Methyl Methacrylate	4.02 U	51.4	4.02	1	04/21/14 23:20	4/18/14	*
Methyl tert-Butyl Ether	2.68 U	51.4	2.68	1	04/21/14 23:20	4/18/14	*
Methylene Chloride	3.19 U	103	3.19	1	04/21/14 23:20	4/18/14	*
Naphthalene	514	103	2.27	1	04/21/14 23:20	4/18/14	*
n-Hexane	3.30 U	51.4	3.30	1	04/21/14 23:20	4/18/14	*
o-Xylene	6.99 I	51.4	1.65	1	04/21/14 23:20	4/18/14	*
Styrene	26.8 I	51.4	2.78	1	04/21/14 23:20	4/18/14	*
Tetrachloroethene (PCE)	2.58 U	51.4	2.58	1	04/21/14 23:20	4/18/14	*
Toluene	50.9 I	51.4	2.78	1	04/21/14 23:20	4/18/14	*
Vinyl Chloride	2.68 U	51.4	2.68	1	04/21/14 23:20	4/18/14	**

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	102	80 - 120	04/21/14 23:20	
4-Bromofluorobenzene	134	64 - 135	04/21/14 23:20	
Dibromofluoromethane	105	74 - 125	04/21/14 23:20	
Toluene-d8	118	46 - 156	04/21/14 23:20	

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Analytical Report

Client:	Koogler and Associates, Inc.	Service Request:	J1402484
Project:	WasteAway Analysis/808-14-01	Date Collected:	03/21/14 00:00
Sample Matrix:	Misc. Solid	Date Received:	04/08/14 09:25
Sample Name:	WAW	Units:	ug/Kg
Lab Code:	J1402484-004	Basis:	As Received

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270C
Prep Method: EPA 3550C

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4-Trichlorobenzene	36400 U	98100	36400	10	04/22/14 02:23	4/16/14	
1,4-Dichlorobenzene	23700 U	98100	23700	10	04/22/14 02:23	4/16/14	
1-Methylnaphthalene	38100 U	98100	38100	10	04/22/14 02:23	4/16/14	
2,4,5-Trichlorophenol	32900 U	98100	32900	10	04/22/14 02:23	4/16/14	
2,4,6-Trichlorophenol	28900 U	98100	28900	10	04/22/14 02:23	4/16/14	
2,4-Dinitrophenol	13300 U	387000	13300	10	04/22/14 02:23	4/16/14	
2,4-Dinitrotoluene	23700 U	98100	23700	10	04/22/14 02:23	4/16/14	
2-Methylnaphthalene	34100 U	98100	34100	10	04/22/14 02:23	4/16/14	
3,3'-Dichlorobenzidine	49100 U	387000	49100	10	04/22/14 02:23	4/16/14	
4-Nitrophenol	32400 U	387000	32400	10	04/22/14 02:23	4/16/14	
Acenaphthene	30600 U	98100	30600	10	04/22/14 02:23	4/16/14	
Acenaphthylene	27200 U	98100	27200	10	04/22/14 02:23	4/16/14	
Acetophenone	26600 U	196000	26600	10	04/22/14 02:23	4/16/14	
Aniline	46200 U	98100	46200	10	04/22/14 02:23	4/16/14	
Anthracene	24900 U	98100	24900	10	04/22/14 02:23	4/16/14	
Benz(a)anthracene	27200 U	98100	27200	10	04/22/14 02:23	4/16/14	
Benzo(a)pyrene	21400 U	98100	21400	10	04/22/14 02:23	4/16/14	
Benzo(b)fluoranthene	15000 U	98100	15000	10	04/22/14 02:23	4/16/14	
Benzo(g,h,i)perylene	30000 U	98100	30000	10	04/22/14 02:23	4/16/14	
Benzo(k)fluoranthene	34100 U	98100	34100	10	04/22/14 02:23	4/16/14	
Biphenyl	23700 U	196000	23700	10	04/22/14 02:23	4/16/14	
Bis(2-ethylhexyl) Phthalate	604000	98100	25400	10	04/22/14 02:23	4/16/14	
Chrysene	26000 U	98100	26000	10	04/22/14 02:23	4/16/14	
Dibenz(a,h)anthracene	26600 U	98100	26600	10	04/22/14 02:23	4/16/14	
Dibenzofuran	26600 U	98100	26600	10	04/22/14 02:23	4/16/14	
Dimethyl Phthalate	30600 U	98100	30600	10	04/22/14 02:23	4/16/14	
Fluoranthene	27700 U	98100	27700	10	04/22/14 02:23	4/16/14	
Fluorene	27200 U	98100	27200	10	04/22/14 02:23	4/16/14	
Hexachlorobenzene	27700 U	98100	27700	10	04/22/14 02:23	4/16/14	
Hexachlorobutadiene	31800 U	98100	31800	10	04/22/14 02:23	4/16/14	
Hexachlorocyclopentadiene	19700 U	98100	19700	10	04/22/14 02:23	4/16/14	
Hexachloroethane	17900 U	98100	17900	10	04/22/14 02:23	4/16/14	
Indeno(1,2,3-cd)pyrene	23700 U	98100	23700	10	04/22/14 02:23	4/16/14	
Naphthalene	28300 U	98100	28300	10	04/22/14 02:23	4/16/14	
Nitrobenzene	22500 U	98100	22500	10	04/22/14 02:23	4/16/14	
Pentachlorophenol (PCP)	20200 U	387000	20200	10	04/22/14 02:23	4/16/14	
Phenanthrene	24300 U	98100	24300	10	04/22/14 02:23	4/16/14	
Phenol	26600 U	98100	26600	10	04/22/14 02:23	4/16/14	
Pyrene	26600 U	98100	26600	10	04/22/14 02:23	4/16/14	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	23	28 - 164	04/22/14 02:23	*

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Analytical Report

Client: Koogler and Associates, Inc.
Project: WasteAway Analysis/808-14-01
Sample Matrix: Misc. Solid

Sample Name: WAW
Lab Code: J1402484-004

Service Request: J1402484
Date Collected: 03/21/14 00:00
Date Received: 04/08/14 09:25

Units: ug/Kg
Basis: As Received

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270C
Prep Method: EPA 3550C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2-Fluorobiphenyl	52	33 - 133	04/22/14 02:23	
2-Fluorophenol	20	10 - 126	04/22/14 02:23	
Nitrobenzene-d5	32	25 - 138	04/22/14 02:23	
Phenol-d6	30	10 - 170	04/22/14 02:23	
p-Terphenyl-d14	55	16 - 168	04/22/14 02:23	

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Analytical Report

Client: Koogler and Associates, Inc.
Project: WasteAway Analysis/808-14-01
Sample Matrix: Misc. Solid

Service Request: J1402484
Date Collected: 03/21/14 00:00
Date Received: 04/08/14 09:25

Sample Name: WAW
Lab Code: J1402484-004

Units: ug/Kg
Basis: As Received

Carbonyl Compounds by High Performance Liquid Chromatography (HPLC)

Analysis Method: 8315A
Prep Method: Method

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Formaldehyde	3900	1600	420	1	04/17/14 21:25	4/16/14	

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Analytical Report

Client:	Koogler and Associates, Inc.	Service Request:	J1402484
Project:	WasteAway Analysis/808-14-01	Date Collected:	03/21/14 00:00
Sample Matrix:	Misc. Solid	Date Received:	04/08/14 09:25
Sample Name:	WAW	Basis:	As Received
Lab Code:	J1402484-004		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	PQL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Antimony, Total Recoverable	6010B	50.0	mg/Kg	0.83	0.13	1	04/17/14 21:19	04/17/14	
Arsenic, Total Recoverable	6010B	1.83	mg/Kg	0.83	0.20	1	04/17/14 21:19	04/17/14	
Beryllium, Total Recoverable	6010B	0.02 U	mg/Kg	0.33	0.02	1	04/17/14 21:19	04/17/14	
Cadmium, Total Recoverable	6010B	1.00	mg/Kg	0.42	0.02	1	04/17/14 21:19	04/17/14	
Chromium, Total Recoverable	6010B	39.7	mg/Kg	0.83	0.04	1	04/17/14 21:19	04/17/14	
Cobalt, Total Recoverable	6010B	7.08	mg/Kg	0.83	0.07	1	04/17/14 21:19	04/17/14	
Lead, Total Recoverable	6010B	101	mg/Kg	0.83	0.22	1	04/17/14 21:19	04/17/14	
Manganese, Total Recoverable	6010B	117	mg/Kg	0.83	0.02	1	04/17/14 21:19	04/17/14	
Mercury, Total	7471B	0.124	mg/Kg	0.015	0.003	1	04/18/14 15:25	04/17/14	
Nickel, Total Recoverable	6010B	12.0	mg/Kg	0.83	0.06	1	04/17/14 21:19	04/17/14	
Selenium, Total Recoverable	6010B	0.46 U	mg/Kg	0.83	0.46	1	04/17/14 21:19	04/17/14	

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Analytical Report

Client: Koogler and Associates, Inc.
Project: WasteAway Analysis/808-14-01
Sample Matrix: Misc. Solid

Sample Name: WAW
Lab Code: J1402484-004

Service Request: J1402484
Date Collected: 03/21/14 00:00
Date Received: 04/08/14 09:25

Basis: As Received

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	PQL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Bromide	9056	12 I	mg/Kg	19	3	10	04/30/14 05:05	04/29/14	*
Chloride	9056	3070	mg/Kg	97	16	10	04/30/14 05:05	04/29/14	*
Fluoride	9056	1000 JL	mg/Kg	19	3	10	04/30/14 05:05	04/29/14	*

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Analytical Report

Client:	Koogler and Associates, Inc.	Service Request:	J1402484
Project:	WasteAway Analysis/808-14-01	Date Collected:	03/24/14 00:00
Sample Matrix:	Misc. Solid	Date Received:	04/08/14 09:25
Sample Name:	WAW	Units:	ug/Kg
Lab Code:	J1402484-005	Basis:	As Received

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B
Prep Method: EPA 5035

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,1,2,2-Tetrachloroethane	1.75 U	37.9	1.75	1	04/21/14 23:46	4/18/14	*
1,1,2-Trichloroethane	2.96 U	37.9	2.96	1	04/21/14 23:46	4/18/14	*
1,2,4-Trichlorobenzene	0.985 U	75.7	0.985	1	04/21/14 23:46	4/18/14	*
1,4-Dichlorobenzene	0.758 U	37.9	0.758	1	04/21/14 23:46	4/18/14	*
Acetonitrile	23.5 U	757	23.5	1	04/21/14 23:46	4/18/14	*
Acrolein	52.3 U	757	52.3	1	04/21/14 23:46	4/18/14	*
Acrylonitrile	19.7 U	75.7	19.7	1	04/21/14 23:46	4/18/14	*
Allyl Chloride	2.73 U	75.7	2.73	1	04/21/14 23:46	4/18/14	*
Benzene	1.29 U	37.9	1.29	1	04/21/14 23:46	4/18/14	*
Bromoform	2.58 U	37.9	2.58	1	04/21/14 23:46	4/18/14	*
Chlorobenzene	1.06 U	37.9	1.06	1	04/21/14 23:46	4/18/14	*
Chloroform	46.9	37.9	1.37	1	04/21/14 23:46	4/18/14	*
Chloroprene	1.75 U	37.9	1.75	1	04/21/14 23:46	4/18/14	*
Ethylbenzene	7.49 I	37.9	0.909	1	04/21/14 23:46	4/18/14	*
Hexachlorobutadiene	1.75 U	75.7	1.75	1	04/21/14 23:46	4/18/14	*
Isopropylbenzene	1.06 U	37.9	1.06	1	04/21/14 23:46	4/18/14	*
m,p-Xylenes	10.1 I	75.7	1.59	1	04/21/14 23:46	4/18/14	*
Methyl Methacrylate	2.96 U	37.9	2.96	1	04/21/14 23:46	4/18/14	*
Methyl tert-Butyl Ether	1.97 U	37.9	1.97	1	04/21/14 23:46	4/18/14	*
Methylene Chloride	2.35 U	75.7	2.35	1	04/21/14 23:46	4/18/14	*
Naphthalene	267	75.7	1.67	1	04/21/14 23:46	4/18/14	*
n-Hexane	2.43 U	37.9	2.43	1	04/21/14 23:46	4/18/14	*
o-Xylene	7.04 I	37.9	1.22	1	04/21/14 23:46	4/18/14	*
Styrene	33.2 I	37.9	2.05	1	04/21/14 23:46	4/18/14	*
Tetrachloroethene (PCE)	1.90 U	37.9	1.90	1	04/21/14 23:46	4/18/14	*
Toluene	47.6	37.9	2.05	1	04/21/14 23:46	4/18/14	*
Vinyl Chloride	1.97 U	37.9	1.97	1	04/21/14 23:46	4/18/14	**

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	99	80 - 120	04/21/14 23:46	
4-Bromofluorobenzene	141	64 - 135	04/21/14 23:46	*
Dibromofluoromethane	105	74 - 125	04/21/14 23:46	
Toluene-d8	116	46 - 156	04/21/14 23:46	

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Analytical Report

Client:	Koogler and Associates, Inc.	Service Request:	J1402484
Project:	WasteAway Analysis/808-14-01	Date Collected:	03/24/14 00:00
Sample Matrix:	Misc. Solid	Date Received:	04/08/14 09:25
Sample Name:	WAW	Units:	ug/Kg
Lab Code:	J1402484-005	Basis:	As Received

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270C
Prep Method: EPA 3550C

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4-Trichlorobenzene	36400 U	98100	36400	10	04/22/14 03:00	4/16/14	
1,4-Dichlorobenzene	23700 U	98100	23700	10	04/22/14 03:00	4/16/14	
1-Methylnaphthalene	38100 U	98100	38100	10	04/22/14 03:00	4/16/14	
2,4,5-Trichlorophenol	32900 U	98100	32900	10	04/22/14 03:00	4/16/14	
2,4,6-Trichlorophenol	28900 U	98100	28900	10	04/22/14 03:00	4/16/14	
2,4-Dinitrophenol	13300 U	387000	13300	10	04/22/14 03:00	4/16/14	
2,4-Dinitrotoluene	23700 U	98100	23700	10	04/22/14 03:00	4/16/14	
2-Methylnaphthalene	34100 U	98100	34100	10	04/22/14 03:00	4/16/14	
3,3'-Dichlorobenzidine	49100 U	387000	49100	10	04/22/14 03:00	4/16/14	
4-Nitrophenol	32400 U	387000	32400	10	04/22/14 03:00	4/16/14	
Acenaphthene	30600 U	98100	30600	10	04/22/14 03:00	4/16/14	
Acenaphthylene	27200 U	98100	27200	10	04/22/14 03:00	4/16/14	
Acetophenone	26600 U	196000	26600	10	04/22/14 03:00	4/16/14	
Aniline	46200 U	98100	46200	10	04/22/14 03:00	4/16/14	
Anthracene	24900 U	98100	24900	10	04/22/14 03:00	4/16/14	
Benz(a)anthracene	27200 U	98100	27200	10	04/22/14 03:00	4/16/14	
Benzo(a)pyrene	21400 U	98100	21400	10	04/22/14 03:00	4/16/14	
Benzo(b)fluoranthene	15000 U	98100	15000	10	04/22/14 03:00	4/16/14	
Benzo(g,h,i)perylene	30000 U	98100	30000	10	04/22/14 03:00	4/16/14	
Benzo(k)fluoranthene	34100 U	98100	34100	10	04/22/14 03:00	4/16/14	
Biphenyl	23700 U	196000	23700	10	04/22/14 03:00	4/16/14	
Bis(2-ethylhexyl) Phthalate	660000	98100	25400	10	04/22/14 03:00	4/16/14	
Chrysene	26000 U	98100	26000	10	04/22/14 03:00	4/16/14	
Dibenz(a,h)anthracene	26600 U	98100	26600	10	04/22/14 03:00	4/16/14	
Dibenzofuran	26600 U	98100	26600	10	04/22/14 03:00	4/16/14	
Dimethyl Phthalate	30600 U	98100	30600	10	04/22/14 03:00	4/16/14	
Fluoranthene	27700 U	98100	27700	10	04/22/14 03:00	4/16/14	
Fluorene	27200 U	98100	27200	10	04/22/14 03:00	4/16/14	
Hexachlorobenzene	27700 U	98100	27700	10	04/22/14 03:00	4/16/14	
Hexachlorobutadiene	31800 U	98100	31800	10	04/22/14 03:00	4/16/14	
Hexachlorocyclopentadiene	19700 U	98100	19700	10	04/22/14 03:00	4/16/14	
Hexachloroethane	17900 U	98100	17900	10	04/22/14 03:00	4/16/14	
Indeno(1,2,3-cd)pyrene	23700 U	98100	23700	10	04/22/14 03:00	4/16/14	
Naphthalene	28300 U	98100	28300	10	04/22/14 03:00	4/16/14	
Nitrobenzene	22500 U	98100	22500	10	04/22/14 03:00	4/16/14	
Pentachlorophenol (PCP)	20200 U	387000	20200	10	04/22/14 03:00	4/16/14	
Phenanthrene	24300 U	98100	24300	10	04/22/14 03:00	4/16/14	
Phenol	26600 U	98100	26600	10	04/22/14 03:00	4/16/14	
Pyrene	26600 U	98100	26600	10	04/22/14 03:00	4/16/14	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	32	28 - 164	04/22/14 03:00	

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Analytical Report

Client: Koogler and Associates, Inc.
Project: WasteAway Analysis/808-14-01
Sample Matrix: Misc. Solid

Sample Name: WAW
Lab Code: J1402484-005

Service Request: J1402484
Date Collected: 03/24/14 00:00
Date Received: 04/08/14 09:25

Units: ug/Kg
Basis: As Received

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270C
Prep Method: EPA 3550C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2-Fluorobiphenyl	65	33 - 133	04/22/14 03:00	
2-Fluorophenol	30	10 - 126	04/22/14 03:00	
Nitrobenzene-d5	45	25 - 138	04/22/14 03:00	
Phenol-d6	40	10 - 170	04/22/14 03:00	
p-Terphenyl-d14	62	16 - 168	04/22/14 03:00	

ALS Group USA, Corp.
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Analytical Report

Client: Koogler and Associates, Inc.
Project: WasteAway Analysis/808-14-01
Sample Matrix: Misc. Solid

Sample Name: WAW
Lab Code: J1402484-005

Service Request: J1402484
Date Collected: 03/24/14 00:00
Date Received: 04/08/14 09:25

Units: ug/Kg
Basis: As Received

Carbonyl Compounds by High Performance Liquid Chromatography (HPLC)

Analysis Method: 8315A
Prep Method: Method

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Formaldehyde	3500	1600	420	1	04/17/14 21:46	4/16/14	

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Analytical Report

Client:	Koogler and Associates, Inc.	Service Request:	J1402484
Project:	WasteAway Analysis/808-14-01	Date Collected:	03/24/14 00:00
Sample Matrix:	Misc. Solid	Date Received:	04/08/14 09:25
Sample Name:	WAW	Basis:	As Received
Lab Code:	J1402484-005		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	PQL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Antimony, Total Recoverable	6010B	43.3	mg/Kg	0.88	0.13	1	04/17/14 21:23	04/17/14	
Arsenic, Total Recoverable	6010B	1.58	mg/Kg	0.88	0.21	1	04/17/14 21:23	04/17/14	
Beryllium, Total Recoverable	6010B	0.02 U	mg/Kg	0.35	0.02	1	04/17/14 21:23	04/17/14	
Cadmium, Total Recoverable	6010B	1.05	mg/Kg	0.44	0.02	1	04/17/14 21:23	04/17/14	
Chromium, Total Recoverable	6010B	38.5	mg/Kg	0.88	0.04	1	04/17/14 21:23	04/17/14	
Cobalt, Total Recoverable	6010B	6.32	mg/Kg	0.88	0.08	1	04/17/14 21:23	04/17/14	
Lead, Total Recoverable	6010B	107	mg/Kg	0.88	0.23	1	04/17/14 21:23	04/17/14	
Manganese, Total Recoverable	6010B	124	mg/Kg	0.88	0.02	1	04/17/14 21:23	04/17/14	
Mercury, Total	7471B	0.135	mg/Kg	0.015	0.003	1	04/18/14 15:26	04/17/14	
Nickel, Total Recoverable	6010B	10.4	mg/Kg	0.88	0.06	1	04/17/14 21:23	04/17/14	
Selenium, Total Recoverable	6010B	0.48 U	mg/Kg	0.88	0.48	1	04/17/14 21:23	04/17/14	

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Analytical Report

Client: Koogler and Associates, Inc.
Project: WasteAway Analysis/808-14-01
Sample Matrix: Misc. Solid
Sample Name: WAW
Lab Code: J1402484-005

Service Request: J1402484
Date Collected: 03/24/14 00:00
Date Received: 04/08/14 09:25
Basis: As Received

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	PQL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Bromide	9056	14 I	mg/Kg	20	3	10	04/30/14 05:21	04/29/14	*
Chloride	9056	3190	mg/Kg	98	16	10	04/30/14 05:21	04/29/14	*
Fluoride	9056	1090 JL	mg/Kg	20	3	10	04/30/14 05:21	04/29/14	*

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Analytical Report

Client:	Koogler and Associates, Inc.	Service Request:	J1402484
Project:	WasteAway Analysis/808-14-01	Date Collected:	03/26/14 00:00
Sample Matrix:	Misc. Solid	Date Received:	04/08/14 09:25
Sample Name:	WAW	Units:	ug/Kg
Lab Code:	J1402484-006	Basis:	As Received

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B
Prep Method: EPA 5035

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,1,2,2-Tetrachloroethane	1.98 U	42.9	1.98	1	04/22/14 00:11	4/18/14	*
1,1,2-Trichloroethane	3.35 U	42.9	3.35	1	04/22/14 00:11	4/18/14	*
1,2,4-Trichlorobenzene	1.12 U	85.8	1.12	1	04/22/14 00:11	4/18/14	*
1,4-Dichlorobenzene	0.859 U	42.9	0.859	1	04/22/14 00:11	4/18/14	*
Acetonitrile	26.7 U	858	26.7	1	04/22/14 00:11	4/18/14	*
Acrolein	59.3 U	858	59.3	1	04/22/14 00:11	4/18/14	*
Acrylonitrile	22.4 U	85.8	22.4	1	04/22/14 00:11	4/18/14	*
Allyl Chloride	3.09 U	85.8	3.09	1	04/22/14 00:11	4/18/14	*
Benzene	1.46 U	42.9	1.46	1	04/22/14 00:11	4/18/14	*
Bromoform	2.92 U	42.9	2.92	1	04/22/14 00:11	4/18/14	*
Chlorobenzene	1.21 U	42.9	1.21	1	04/22/14 00:11	4/18/14	*
Chloroform	10.5 I	42.9	1.55	1	04/22/14 00:11	4/18/14	*
Chloroprene	1.98 U	42.9	1.98	1	04/22/14 00:11	4/18/14	*
Ethylbenzene	1.03 U	42.9	1.03	1	04/22/14 00:11	4/18/14	*
Hexachlorobutadiene	1.98 U	85.8	1.98	1	04/22/14 00:11	4/18/14	*
Isopropylbenzene	1.21 U	42.9	1.21	1	04/22/14 00:11	4/18/14	*
m,p-Xylenes	6.86 I	85.8	1.81	1	04/22/14 00:11	4/18/14	*
Methyl Methacrylate	3.35 U	42.9	3.35	1	04/22/14 00:11	4/18/14	*
Methyl tert-Butyl Ether	2.24 U	42.9	2.24	1	04/22/14 00:11	4/18/14	*
Methylene Chloride	2.67 U	85.8	2.67	1	04/22/14 00:11	4/18/14	*
Naphthalene	211	85.8	1.89	1	04/22/14 00:11	4/18/14	*
n-Hexane	2.75 U	42.9	2.75	1	04/22/14 00:11	4/18/14	*
o-Xylene	4.81 I	42.9	1.38	1	04/22/14 00:11	4/18/14	*
Styrene	14.2 I	42.9	2.32	1	04/22/14 00:11	4/18/14	*
Tetrachloroethene (PCE)	2.15 U	42.9	2.15	1	04/22/14 00:11	4/18/14	*
Toluene	33.6 I	42.9	2.32	1	04/22/14 00:11	4/18/14	*
Vinyl Chloride	2.24 U	42.9	2.24	1	04/22/14 00:11	4/18/14	**

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	104	80 - 120	04/22/14 00:11	
4-Bromofluorobenzene	139	64 - 135	04/22/14 00:11	*
Dibromofluoromethane	107	74 - 125	04/22/14 00:11	
Toluene-d8	116	46 - 156	04/22/14 00:11	

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Analytical Report

Client:	Koogler and Associates, Inc.	Service Request:	J1402484
Project:	WasteAway Analysis/808-14-01	Date Collected:	03/26/14 00:00
Sample Matrix:	Misc. Solid	Date Received:	04/08/14 09:25
Sample Name:	WAW	Units:	ug/Kg
Lab Code:	J1402484-006	Basis:	As Received

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270C
Prep Method: EPA 3550C

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4-Trichlorobenzene	36400 U	98100	36400	10	04/22/14 03:37	4/16/14	
1,4-Dichlorobenzene	23700 U	98100	23700	10	04/22/14 03:37	4/16/14	
1-Methylnaphthalene	38100 U	98100	38100	10	04/22/14 03:37	4/16/14	
2,4,5-Trichlorophenol	32900 U	98100	32900	10	04/22/14 03:37	4/16/14	
2,4,6-Trichlorophenol	28900 U	98100	28900	10	04/22/14 03:37	4/16/14	
2,4-Dinitrophenol	13300 U	387000	13300	10	04/22/14 03:37	4/16/14	
2,4-Dinitrotoluene	23700 U	98100	23700	10	04/22/14 03:37	4/16/14	
2-Methylnaphthalene	34100 U	98100	34100	10	04/22/14 03:37	4/16/14	
3,3'-Dichlorobenzidine	49100 U	387000	49100	10	04/22/14 03:37	4/16/14	
4-Nitrophenol	32400 U	387000	32400	10	04/22/14 03:37	4/16/14	
Acenaphthene	30600 U	98100	30600	10	04/22/14 03:37	4/16/14	
Acenaphthylene	27200 U	98100	27200	10	04/22/14 03:37	4/16/14	
Acetophenone	26600 U	196000	26600	10	04/22/14 03:37	4/16/14	
Aniline	46200 U	98100	46200	10	04/22/14 03:37	4/16/14	
Anthracene	24900 U	98100	24900	10	04/22/14 03:37	4/16/14	
Benz(a)anthracene	27200 U	98100	27200	10	04/22/14 03:37	4/16/14	
Benzo(a)pyrene	21400 U	98100	21400	10	04/22/14 03:37	4/16/14	
Benzo(b)fluoranthene	15000 U	98100	15000	10	04/22/14 03:37	4/16/14	
Benzo(g,h,i)perylene	30000 U	98100	30000	10	04/22/14 03:37	4/16/14	
Benzo(k)fluoranthene	34100 U	98100	34100	10	04/22/14 03:37	4/16/14	
Biphenyl	23700 U	196000	23700	10	04/22/14 03:37	4/16/14	
Bis(2-ethylhexyl) Phthalate	462000	98100	25400	10	04/22/14 03:37	4/16/14	
Chrysene	26000 U	98100	26000	10	04/22/14 03:37	4/16/14	
Dibenz(a,h)anthracene	26600 U	98100	26600	10	04/22/14 03:37	4/16/14	
Dibenzofuran	26600 U	98100	26600	10	04/22/14 03:37	4/16/14	
Dimethyl Phthalate	30600 U	98100	30600	10	04/22/14 03:37	4/16/14	
Fluoranthene	27700 U	98100	27700	10	04/22/14 03:37	4/16/14	
Fluorene	27200 U	98100	27200	10	04/22/14 03:37	4/16/14	
Hexachlorobenzene	27700 U	98100	27700	10	04/22/14 03:37	4/16/14	
Hexachlorobutadiene	31800 U	98100	31800	10	04/22/14 03:37	4/16/14	
Hexachlorocyclopentadiene	19700 U	98100	19700	10	04/22/14 03:37	4/16/14	
Hexachloroethane	17900 U	98100	17900	10	04/22/14 03:37	4/16/14	
Indeno(1,2,3-cd)pyrene	23700 U	98100	23700	10	04/22/14 03:37	4/16/14	
Naphthalene	28300 U	98100	28300	10	04/22/14 03:37	4/16/14	
Nitrobenzene	22500 U	98100	22500	10	04/22/14 03:37	4/16/14	
Pentachlorophenol (PCP)	20200 U	387000	20200	10	04/22/14 03:37	4/16/14	
Phenanthrene	24300 U	98100	24300	10	04/22/14 03:37	4/16/14	
Phenol	26600 U	98100	26600	10	04/22/14 03:37	4/16/14	
Pyrene	26600 U	98100	26600	10	04/22/14 03:37	4/16/14	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	8	28 - 164	04/22/14 03:37	*

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Analytical Report

Client: Koogler and Associates, Inc.
Project: WasteAway Analysis/808-14-01
Sample Matrix: Misc. Solid

Sample Name: WAW
Lab Code: J1402484-006

Service Request: J1402484
Date Collected: 03/26/14 00:00
Date Received: 04/08/14 09:25

Units: ug/Kg
Basis: As Received

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270C
Prep Method: EPA 3550C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2-Fluorobiphenyl	42	33 - 133	04/22/14 03:37	
2-Fluorophenol	15	10 - 126	04/22/14 03:37	
Nitrobenzene-d5	25	25 - 138	04/22/14 03:37	
Phenol-d6	25	10 - 170	04/22/14 03:37	
p-Terphenyl-d14	42	16 - 168	04/22/14 03:37	

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Analytical Report

Client: Koogler and Associates, Inc.
Project: WasteAway Analysis/808-14-01
Sample Matrix: Misc. Solid

Service Request: J1402484
Date Collected: 03/26/14 00:00
Date Received: 04/08/14 09:25

Sample Name: WAW
Lab Code: J1402484-006

Units: ug/Kg
Basis: As Received

Carbonyl Compounds by High Performance Liquid Chromatography (HPLC)

Analysis Method: 8315A
Prep Method: Method

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Formaldehyde	2900	1600	420	1	04/17/14 22:07	4/16/14	

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Analytical Report

Client:	Koogler and Associates, Inc.	Service Request:	J1402484
Project:	WasteAway Analysis/808-14-01	Date Collected:	03/26/14 00:00
Sample Matrix:	Misc. Solid	Date Received:	04/08/14 09:25
Sample Name:	WAW	Basis:	As Received
Lab Code:	J1402484-006		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	PQL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Antimony, Total Recoverable	6010B	54.3	mg/Kg	0.83	0.13	1	04/17/14 21:27	04/17/14	
Arsenic, Total Recoverable	6010B	1.92	mg/Kg	0.83	0.20	1	04/17/14 21:27	04/17/14	
Beryllium, Total Recoverable	6010B	0.08 I	mg/Kg	0.33	0.02	1	04/17/14 21:27	04/17/14	
Cadmium, Total Recoverable	6010B	0.92	mg/Kg	0.42	0.02	1	04/17/14 21:27	04/17/14	
Chromium, Total Recoverable	6010B	58.5	mg/Kg	0.83	0.04	1	04/17/14 21:27	04/17/14	
Cobalt, Total Recoverable	6010B	7.83	mg/Kg	0.83	0.07	1	04/17/14 21:27	04/17/14	
Lead, Total Recoverable	6010B	112	mg/Kg	0.83	0.22	1	04/17/14 21:27	04/17/14	
Manganese, Total Recoverable	6010B	130	mg/Kg	0.83	0.02	1	04/17/14 21:27	04/17/14	
Mercury, Total	7471B	0.135	mg/Kg	0.012	0.002	1	04/18/14 15:28	04/17/14	
Nickel, Total Recoverable	6010B	15.7	mg/Kg	0.83	0.06	1	04/17/14 21:27	04/17/14	
Selenium, Total Recoverable	6010B	0.46 U	mg/Kg	0.83	0.46	1	04/17/14 21:27	04/17/14	

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Analytical Report

Client: Koogler and Associates, Inc.
Project: WasteAway Analysis/808-14-01
Sample Matrix: Misc. Solid

Sample Name: WAW
Lab Code: J1402484-006

Service Request: J1402484
Date Collected: 03/26/14 00:00
Date Received: 04/08/14 09:25

Basis: As Received

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	PQL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Bromide	9056	12 I	mg/Kg	18	3	10	04/30/14 05:37	04/29/14	*
Chloride	9056	3030	mg/Kg	90	16	10	04/30/14 05:37	04/29/14	*
Fluoride	9056	1060 JL	mg/Kg	18	3	10	04/30/14 05:37	04/29/14	*

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Analytical Report

Client:	Koogler and Associates, Inc.	Service Request:	J1402484
Project:	WasteAway Analysis/808-14-01	Date Collected:	03/27/14 00:00
Sample Matrix:	Misc. Solid	Date Received:	04/08/14 09:25
Sample Name:	WAW	Units:	ug/Kg
Lab Code:	J1402484-007	Basis:	As Received

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B
Prep Method: EPA 5035

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,1,2,2-Tetrachloroethane	1.20 U	25.9	1.20	1	04/22/14 00:37	4/18/14	*
1,1,2-Trichloroethane	2.03 U	25.9	2.03	1	04/22/14 00:37	4/18/14	*
1,2,4-Trichlorobenzene	0.674 U	51.8	0.674	1	04/22/14 00:37	4/18/14	*
1,4-Dichlorobenzene	0.519 U	25.9	0.519	1	04/22/14 00:37	4/18/14	*
Acetonitrile	16.1 U	518	16.1	1	04/22/14 00:37	4/18/14	*
Acrolein	35.8 U	518	35.8	1	04/22/14 00:37	4/18/14	*
Acrylonitrile	13.5 U	51.8	13.5	1	04/22/14 00:37	4/18/14	*
Allyl Chloride	1.87 U	51.8	1.87	1	04/22/14 00:37	4/18/14	*
Benzene	0.882 U	25.9	0.882	1	04/22/14 00:37	4/18/14	*
Bromoform	1.77 U	25.9	1.77	1	04/22/14 00:37	4/18/14	*
Chlorobenzene	0.726 U	25.9	0.726	1	04/22/14 00:37	4/18/14	*
Chloroform	19.3 I	25.9	0.934	1	04/22/14 00:37	4/18/14	*
Chloroprene	1.20 U	25.9	1.20	1	04/22/14 00:37	4/18/14	*
Ethylbenzene	2.80 I	25.9	0.623	1	04/22/14 00:37	4/18/14	*
Hexachlorobutadiene	1.20 U	51.8	1.20	1	04/22/14 00:37	4/18/14	*
Isopropylbenzene	0.726 U	25.9	0.726	1	04/22/14 00:37	4/18/14	*
m,p-Xylenes	7.10 I	51.8	1.09	1	04/22/14 00:37	4/18/14	*
Methyl Methacrylate	2.03 U	25.9	2.03	1	04/22/14 00:37	4/18/14	*
Methyl tert-Butyl Ether	1.35 U	25.9	1.35	1	04/22/14 00:37	4/18/14	*
Methylene Chloride	5.34 I	51.8	1.61	1	04/22/14 00:37	4/18/14	*
Naphthalene	211	51.8	1.15	1	04/22/14 00:37	4/18/14	*
n-Hexane	1.66 U	25.9	1.66	1	04/22/14 00:37	4/18/14	*
o-Xylene	4.25 I	25.9	0.830	1	04/22/14 00:37	4/18/14	*
Styrene	11.8 I	25.9	1.40	1	04/22/14 00:37	4/18/14	*
Tetrachloroethene (PCE)	1.30 U	25.9	1.30	1	04/22/14 00:37	4/18/14	*
Toluene	37.5	25.9	1.40	1	04/22/14 00:37	4/18/14	*
Vinyl Chloride	1.35 U	25.9	1.35	1	04/22/14 00:37	4/18/14	**

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	111	80 - 120	04/22/14 00:37	
4-Bromofluorobenzene	153	64 - 135	04/22/14 00:37	*
Dibromofluoromethane	107	74 - 125	04/22/14 00:37	
Toluene-d8	116	46 - 156	04/22/14 00:37	

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Analytical Report

Client:	Koogler and Associates, Inc.	Service Request:	J1402484
Project:	WasteAway Analysis/808-14-01	Date Collected:	03/27/14 00:00
Sample Matrix:	Misc. Solid	Date Received:	04/08/14 09:25
Sample Name:	WAW	Units:	ug/Kg
Lab Code:	J1402484-007	Basis:	As Received

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270C
Prep Method: EPA 3550C

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4-Trichlorobenzene	37100 U	100000	37100	10	04/22/14 04:13	4/16/14	
1,4-Dichlorobenzene	24200 U	100000	24200	10	04/22/14 04:13	4/16/14	
1-Methylnaphthalene	38900 U	100000	38900	10	04/22/14 04:13	4/16/14	
2,4,5-Trichlorophenol	33600 U	100000	33600	10	04/22/14 04:13	4/16/14	
2,4,6-Trichlorophenol	29500 U	100000	29500	10	04/22/14 04:13	4/16/14	
2,4-Dinitrophenol	13600 U	394000	13600	10	04/22/14 04:13	4/16/14	
2,4-Dinitrotoluene	24200 U	100000	24200	10	04/22/14 04:13	4/16/14	
2-Methylnaphthalene	34800 U	100000	34800	10	04/22/14 04:13	4/16/14	
3,3'-Dichlorobenzidine	50000 U	394000	50000	10	04/22/14 04:13	4/16/14	
4-Nitrophenol	33000 U	394000	33000	10	04/22/14 04:13	4/16/14	
Acenaphthene	31200 U	100000	31200	10	04/22/14 04:13	4/16/14	
Acenaphthylene	27700 U	100000	27700	10	04/22/14 04:13	4/16/14	
Acetophenone	27100 U	200000	27100	10	04/22/14 04:13	4/16/14	
Aniline	47100 U	100000	47100	10	04/22/14 04:13	4/16/14	
Anthracene	25300 U	100000	25300	10	04/22/14 04:13	4/16/14	
Benz(a)anthracene	27700 U	100000	27700	10	04/22/14 04:13	4/16/14	
Benzo(a)pyrene	21800 U	100000	21800	10	04/22/14 04:13	4/16/14	
Benzo(b)fluoranthene	15300 U	100000	15300	10	04/22/14 04:13	4/16/14	
Benzo(g,h,i)perylene	30600 U	100000	30600	10	04/22/14 04:13	4/16/14	
Benzo(k)fluoranthene	34800 U	100000	34800	10	04/22/14 04:13	4/16/14	
Biphenyl	24200 U	200000	24200	10	04/22/14 04:13	4/16/14	
Bis(2-ethylhexyl) Phthalate	547000	100000	25900	10	04/22/14 04:13	4/16/14	
Chrysene	26500 U	100000	26500	10	04/22/14 04:13	4/16/14	
Dibenz(a,h)anthracene	27100 U	100000	27100	10	04/22/14 04:13	4/16/14	
Dibenzofuran	27100 U	100000	27100	10	04/22/14 04:13	4/16/14	
Dimethyl Phthalate	31200 U	100000	31200	10	04/22/14 04:13	4/16/14	
Fluoranthene	28300 U	100000	28300	10	04/22/14 04:13	4/16/14	
Fluorene	27700 U	100000	27700	10	04/22/14 04:13	4/16/14	
Hexachlorobenzene	28300 U	100000	28300	10	04/22/14 04:13	4/16/14	
Hexachlorobutadiene	32400 U	100000	32400	10	04/22/14 04:13	4/16/14	
Hexachlorocyclopentadiene	20000 U	100000	20000	10	04/22/14 04:13	4/16/14	
Hexachloroethane	18300 U	100000	18300	10	04/22/14 04:13	4/16/14	
Indeno(1,2,3-cd)pyrene	24200 U	100000	24200	10	04/22/14 04:13	4/16/14	
Naphthalene	28900 U	100000	28900	10	04/22/14 04:13	4/16/14	
Nitrobenzene	23000 U	100000	23000	10	04/22/14 04:13	4/16/14	
Pentachlorophenol (PCP)	20600 U	394000	20600	10	04/22/14 04:13	4/16/14	
Phenanthrene	24800 U	100000	24800	10	04/22/14 04:13	4/16/14	
Phenol	27100 U	100000	27100	10	04/22/14 04:13	4/16/14	
Pyrene	27100 U	100000	27100	10	04/22/14 04:13	4/16/14	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	23	28 - 164	04/22/14 04:13	*

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dba ALS Environmental

Analytical Report

Client: Koogler and Associates, Inc.
Project: WasteAway Analysis/808-14-01
Sample Matrix: Misc. Solid

Sample Name: WAW
Lab Code: J1402484-007

Service Request: J1402484
Date Collected: 03/27/14 00:00
Date Received: 04/08/14 09:25

Units: ug/Kg
Basis: As Received

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270C
Prep Method: EPA 3550C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2-Fluorobiphenyl	50	33 - 133	04/22/14 04:13	
2-Fluorophenol	20	10 - 126	04/22/14 04:13	
Nitrobenzene-d5	32	25 - 138	04/22/14 04:13	
Phenol-d6	30	10 - 170	04/22/14 04:13	
p-Terphenyl-d14	48	16 - 168	04/22/14 04:13	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Koogler and Associates, Inc.
Project: WasteAway Analysis/808-14-01
Sample Matrix: Misc. Solid

Service Request: J1402484
Date Collected: 03/27/14 00:00
Date Received: 04/08/14 09:25

Sample Name: WAW
Lab Code: J1402484-007

Units: ug/Kg
Basis: As Received

Carbonyl Compounds by High Performance Liquid Chromatography (HPLC)

Analysis Method: 8315A
Prep Method: Method

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Formaldehyde	3300	1600	420	1	04/17/14 22:28	4/16/14	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Koogler and Associates, Inc.	Service Request:	J1402484
Project:	WasteAway Analysis/808-14-01	Date Collected:	03/27/14 00:00
Sample Matrix:	Misc. Solid	Date Received:	04/08/14 09:25
Sample Name:	WAW	Basis:	As Received
Lab Code:	J1402484-007		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	PQL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Antimony, Total Recoverable	6010B	51.9	mg/Kg	0.83	0.13	1	04/17/14 21:31	04/17/14	
Arsenic, Total Recoverable	6010B	1.58	mg/Kg	0.83	0.20	1	04/17/14 21:31	04/17/14	
Beryllium, Total Recoverable	6010B	0.17 I	mg/Kg	0.33	0.02	1	04/17/14 21:31	04/17/14	
Cadmium, Total Recoverable	6010B	0.92	mg/Kg	0.42	0.02	1	04/17/14 21:31	04/17/14	
Chromium, Total Recoverable	6010B	37.1	mg/Kg	0.83	0.04	1	04/17/14 21:31	04/17/14	
Cobalt, Total Recoverable	6010B	6.58	mg/Kg	0.83	0.07	1	04/17/14 21:31	04/17/14	
Lead, Total Recoverable	6010B	112	mg/Kg	0.83	0.22	1	04/17/14 21:31	04/17/14	
Manganese, Total Recoverable	6010B	390	mg/Kg	0.83	0.02	1	04/17/14 21:31	04/17/14	
Mercury, Total	7471B	0.0798	mg/Kg	0.0067	0.0010	1	04/18/14 15:30	04/17/14	
Nickel, Total Recoverable	6010B	33.5	mg/Kg	0.83	0.06	1	04/17/14 21:31	04/17/14	
Selenium, Total Recoverable	6010B	0.46 U	mg/Kg	0.83	0.46	1	04/17/14 21:31	04/17/14	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Koogler and Associates, Inc.
Project: WasteAway Analysis/808-14-01
Sample Matrix: Misc. Solid
Sample Name: WAW
Lab Code: J1402484-007

Service Request: J1402484
Date Collected: 03/27/14 00:00
Date Received: 04/08/14 09:25
Basis: As Received

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	PQL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Bromide	9056	13 I	mg/Kg	19	3	10	04/30/14 06:25	04/29/14	*
Chloride	9056	3050	mg/Kg	96	16	10	04/30/14 06:25	04/29/14	*
Fluoride	9056	1080 JL	mg/Kg	19	3	10	04/30/14 06:25	04/29/14	*

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Koogler and Associates, Inc.	Service Request:	J1402484
Project:	WasteAway Analysis/808-14-01	Date Collected:	NA
Sample Matrix:	Misc. Solid	Date Received:	NA
Sample Name:	Method Blank	Units:	ug/Kg
Lab Code:	JQ1402932-03	Basis:	As Received

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B
Prep Method: EPA 5035

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,1,2,2-Tetrachloroethane	0.230 U	5.00	0.230	1	04/21/14 21:39	4/18/14	
1,1,2-Trichloroethane	0.390 U	5.00	0.390	1	04/21/14 21:39	4/18/14	
1,2,4-Trichlorobenzene	0.130 U	10.0	0.130	1	04/21/14 21:39	4/18/14	
1,4-Dichlorobenzene	0.100 U	5.00	0.100	1	04/21/14 21:39	4/18/14	
Acetonitrile	3.10 U	100	3.10	1	04/21/14 21:39	4/18/14	
Acrolein	6.90 U	100	6.90	1	04/21/14 21:39	4/18/14	
Acrylonitrile	2.60 U	10.0	2.60	1	04/21/14 21:39	4/18/14	
Allyl Chloride	0.360 U	10.0	0.360	1	04/21/14 21:39	4/18/14	
Benzene	0.170 U	5.00	0.170	1	04/21/14 21:39	4/18/14	
Bromoform	0.340 U	5.00	0.340	1	04/21/14 21:39	4/18/14	
Chlorobenzene	0.140 U	5.00	0.140	1	04/21/14 21:39	4/18/14	
Chloroform	0.180 U	5.00	0.180	1	04/21/14 21:39	4/18/14	
Chloroprene	0.230 U	5.00	0.230	1	04/21/14 21:39	4/18/14	
Ethylbenzene	0.120 U	5.00	0.120	1	04/21/14 21:39	4/18/14	
Hexachlorobutadiene	0.230 U	10.0	0.230	1	04/21/14 21:39	4/18/14	
Isopropylbenzene	0.140 U	5.00	0.140	1	04/21/14 21:39	4/18/14	
m,p-Xylenes	0.210 U	10.0	0.210	1	04/21/14 21:39	4/18/14	
Methyl Methacrylate	0.390 U	5.00	0.390	1	04/21/14 21:39	4/18/14	
Methyl tert-Butyl Ether	0.260 U	5.00	0.260	1	04/21/14 21:39	4/18/14	
Methylene Chloride	0.310 U	10.0	0.310	1	04/21/14 21:39	4/18/14	
Naphthalene	0.220 U	10.0	0.220	1	04/21/14 21:39	4/18/14	
n-Hexane	0.320 U	5.00	0.320	1	04/21/14 21:39	4/18/14	
o-Xylene	0.160 U	5.00	0.160	1	04/21/14 21:39	4/18/14	
Styrene	0.270 U	5.00	0.270	1	04/21/14 21:39	4/18/14	
Tetrachloroethene (PCE)	0.250 U	5.00	0.250	1	04/21/14 21:39	4/18/14	
Toluene	0.270 U	5.00	0.270	1	04/21/14 21:39	4/18/14	
Vinyl Chloride	0.260 U	5.00	0.260	1	04/21/14 21:39	4/18/14	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	87	80 - 120	04/21/14 21:39	
4-Bromofluorobenzene	95	64 - 135	04/21/14 21:39	
Dibromofluoromethane	97	74 - 125	04/21/14 21:39	
Toluene-d8	102	46 - 156	04/21/14 21:39	

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dba ALS Environmental

Analytical Report

Client:	Koogler and Associates, Inc.	Service Request:	J1402484
Project:	WasteAway Analysis/808-14-01	Date Collected:	NA
Sample Matrix:	Misc. Solid	Date Received:	NA
Sample Name:	Method Blank	Units:	ug/Kg
Lab Code:	JQ1402830-01	Basis:	As Received

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270C
Prep Method: EPA 3550C

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4-Trichlorobenzene	63.0 U	170	63.0	1	04/21/14 07:02	4/16/14	
1,4-Dichlorobenzene	41.0 U	170	41.0	1	04/21/14 07:02	4/16/14	
1-Methylnaphthalene	66.0 U	170	66.0	1	04/21/14 07:02	4/16/14	
2,4,5-Trichlorophenol	57.0 U	170	57.0	1	04/21/14 07:02	4/16/14	
2,4,6-Trichlorophenol	50.0 U	170	50.0	1	04/21/14 07:02	4/16/14	
2,4-Dinitrophenol	23.0 U	670	23.0	1	04/21/14 07:02	4/16/14	
2,4-Dinitrotoluene	41.0 U	170	41.0	1	04/21/14 07:02	4/16/14	
2-Methylnaphthalene	59.0 U	170	59.0	1	04/21/14 07:02	4/16/14	
3,3'-Dichlorobenzidine	85.0 U	670	85.0	1	04/21/14 07:02	4/16/14	
4-Nitrophenol	56.0 U	670	56.0	1	04/21/14 07:02	4/16/14	
Acenaphthene	53.0 U	170	53.0	1	04/21/14 07:02	4/16/14	
Acenaphthylene	47.0 U	170	47.0	1	04/21/14 07:02	4/16/14	
Acetophenone	46.0 U	340	46.0	1	04/21/14 07:02	4/16/14	
Aniline	80.0 U	170	80.0	1	04/21/14 07:02	4/16/14	
Anthracene	43.0 U	170	43.0	1	04/21/14 07:02	4/16/14	
Benz(a)anthracene	47.0 U	170	47.0	1	04/21/14 07:02	4/16/14	
Benzo(a)pyrene	37.0 U	170	37.0	1	04/21/14 07:02	4/16/14	
Benzo(b)fluoranthene	26.0 U	170	26.0	1	04/21/14 07:02	4/16/14	
Benzo(g,h,i)perylene	52.0 U	170	52.0	1	04/21/14 07:02	4/16/14	
Benzo(k)fluoranthene	59.0 U	170	59.0	1	04/21/14 07:02	4/16/14	
Biphenyl	41.0 U	340	41.0	1	04/21/14 07:02	4/16/14	
Bis(2-ethylhexyl) Phthalate	44.0 U	170	44.0	1	04/21/14 07:02	4/16/14	
Chrysene	45.0 U	170	45.0	1	04/21/14 07:02	4/16/14	
Dibenz(a,h)anthracene	46.0 U	170	46.0	1	04/21/14 07:02	4/16/14	
Dibenzofuran	46.0 U	170	46.0	1	04/21/14 07:02	4/16/14	
Dimethyl Phthalate	53.0 U	170	53.0	1	04/21/14 07:02	4/16/14	
Fluoranthene	48.0 U	170	48.0	1	04/21/14 07:02	4/16/14	
Fluorene	47.0 U	170	47.0	1	04/21/14 07:02	4/16/14	
Hexachlorobenzene	48.0 U	170	48.0	1	04/21/14 07:02	4/16/14	
Hexachlorobutadiene	55.0 U	170	55.0	1	04/21/14 07:02	4/16/14	
Hexachlorocyclopentadiene	34.0 U	170	34.0	1	04/21/14 07:02	4/16/14	
Hexachloroethane	31.0 U	170	31.0	1	04/21/14 07:02	4/16/14	
Indeno(1,2,3-cd)pyrene	41.0 U	170	41.0	1	04/21/14 07:02	4/16/14	
Naphthalene	49.0 U	170	49.0	1	04/21/14 07:02	4/16/14	
Nitrobenzene	39.0 U	170	39.0	1	04/21/14 07:02	4/16/14	
Pentachlorophenol (PCP)	35.0 U	670	35.0	1	04/21/14 07:02	4/16/14	
Phenanthrene	42.0 U	170	42.0	1	04/21/14 07:02	4/16/14	
Phenol	46.0 U	170	46.0	1	04/21/14 07:02	4/16/14	
Pyrene	46.0 U	170	46.0	1	04/21/14 07:02	4/16/14	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	29	28 - 164	04/21/14 07:02	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Koogler and Associates, Inc. **Service Request:** J1402484
Project: WasteAway Analysis/808-14-01 **Date Collected:** NA
Sample Matrix: Misc. Solid **Date Received:** NA

Sample Name: Method Blank **Units:** ug/Kg
Lab Code: JQ1402830-01 **Basis:** As Received

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270C
Prep Method: EPA 3550C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2-Fluorobiphenyl	41	33 - 133	04/21/14 07:02	
2-Fluorophenol	39	10 - 126	04/21/14 07:02	
Nitrobenzene-d5	39	25 - 138	04/21/14 07:02	
Phenol-d6	41	10 - 170	04/21/14 07:02	
p-Terphenyl-d14	63	16 - 168	04/21/14 07:02	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Koogler and Associates, Inc. **Service Request:** J1402484
Project: WasteAway Analysis/808-14-01 **Date Collected:** NA
Sample Matrix: Misc. Solid **Date Received:** NA

Sample Name: Method Blank **Units:** ug/Kg
Lab Code: RQ1403684-01 **Basis:** As Received

Carbonyl Compounds by High Performance Liquid Chromatography (HPLC)

Analysis Method: 8315A
Prep Method: Method

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Formaldehyde	420 U	1600	420	1	04/17/14 16:48	4/16/14	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Koogler and Associates, Inc.	Service Request:	J1402484
Project:	WasteAway Analysis/808-14-01	Date Collected:	NA
Sample Matrix:	Misc. Solid	Date Received:	NA
Sample Name:	Method Blank	Basis:	As Received
Lab Code:	J1402484-MB		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	PQL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Antimony, Total Recoverable	6010B	0.10 I	mg/Kg	0.50	0.08	1	04/17/14 20:52	04/17/14	
Arsenic, Total Recoverable	6010B	0.12 U	mg/Kg	0.50	0.12	1	04/17/14 20:52	04/17/14	
Beryllium, Total Recoverable	6010B	0.008 U	mg/Kg	0.20	0.008	1	04/17/14 20:52	04/17/14	
Cadmium, Total Recoverable	6010B	0.007 U	mg/Kg	0.25	0.007	1	04/17/14 20:52	04/17/14	
Chromium, Total Recoverable	6010B	0.05 I	mg/Kg	0.50	0.02	1	04/17/14 20:52	04/17/14	
Cobalt, Total Recoverable	6010B	0.05 I	mg/Kg	0.50	0.04	1	04/17/14 20:52	04/17/14	
Lead, Total Recoverable	6010B	0.13 U	mg/Kg	0.50	0.13	1	04/17/14 20:52	04/17/14	
Manganese, Total Recoverable	6010B	0.009 U	mg/Kg	0.50	0.009	1	04/17/14 20:52	04/17/14	
Mercury, Total	7471B	0.0010 U	mg/Kg	0.0067	0.0010	1	04/18/14 15:14	04/17/14	
Nickel, Total Recoverable	6010B	0.05 I	mg/Kg	0.50	0.04	1	04/17/14 20:52	04/17/14	
Selenium, Total Recoverable	6010B	0.27 U	mg/Kg	0.50	0.27	1	04/17/14 20:52	04/17/14	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Koogler and Associates, Inc.
Project: WasteAway Analysis/808-14-01
Sample Matrix: Misc. Solid

Sample Name: Method Blank
Lab Code: J1402484-MB

Service Request: J1402484

Date Collected: NA

Date Received: NA

Basis: As Received

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	PQL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Bromide	9056	0.3 U	mg/Kg	2.0	0.3	1	04/30/14 02:25	04/29/14	
Chloride	9056	4 I	mg/Kg	10	2	1	04/30/14 02:25	04/29/14	
Fluoride	9056	0.3 U	mg/Kg	2.0	0.3	1	04/30/14 02:25	04/29/14	



ADDRESS 3860 S. Palo Verde Road, Suite 302, Tucson, AZ 85714
PHONE +1 520 573 1061 **FAX** +1 520 573 1063

Sample Receipt Form

Client / Project: Konalear Work Order Number: _____

Received by: S. Watson Date: 4/8/14 (0925) Matrix: Solid

Samples were received via? Mail FedEx UPS DHL Courier Hand Other _____

Mail FedEx UPS DHL Courier Hand Other _____

Samples were received in: (circle) Cooler Box Envelope Other _____

Cooler Box Envelope Other _____

Were custody seals on containers? NA Y N If yes, how many and where? _____

NA Y N If yes, how many and where? _____

If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Y N If present, were they signed and dated? Y N

Cooler Temp C	Temp Blank C	Tracking Number
Ambient		12 316 893 03 5212 9143

Important note- temperatures out of range of IR Temperature Gun, use alternative thermometer available in the lab.

Packing material used? **Bags** Bubble Wrap Dry Ice Gel Packs Wet Ice Paper Other _____

Did all bottles arrive in good condition (unbroken)? **NA** **Y** **N** If No, record comments below

Did all sample labels and tags agree with COC? NA Y N If No, record discrepancies below

Were all the appropriate bottles/containers and volumes received for the tests indicated? NA Y N

Are samples received deemed acceptable? Y N

Comments:
SOS

Notes, discrepancies, & resolutions:
→ zip codes

As a part of ISO 17025 protocols, ALS must notify clients that the quoted analytical methods performed by ALS may have minor modifications from the methods as published. These modifications are written into our Standard Operating Procedures and do not impact the quality of the data. Receipt of this document will be considered an acceptance of the procedures used by the laboratory for analysis unless notified by the client. Modifications may include, but are not limited to:

- * The analysis of a sample matrix that differs from that stated in the published method (example - ASTM D5865 Standard Test Method for Gross Calorific Value of Coal and Coke is used for other matrices such as biomass, Tire Derived Fuel, etc.).
 - * Analyzing a sample mass that differs from those in the published method (example - to accommodate samples with high concentrations of analyte, samples of limited volume, or to comply with the instrument manufacturer's operating guidelines).
 - * Instruments used for the analysis may differ from those listed in the published method (example - using ICP-OES when the method references flame Atomic Absorption Spectroscopy).



CHAIN OF CUSTODY / LABORATORY ANALYSIS REQUEST FORM

Report # 100-10000000000000000000000000000000

9143 Phillips Highway, Suite 200, Jacksonville, FL 32256
 Phone (904) 739-2277 / 800-695-7222 x06 / FAX (904) 739-2011

J1402484
 Koogler and Associates, Inc.
 WasteAway Analysis

5

www.alsglobal.com

ANALYSIS REQUESTED (Include Method Number and Comments)										
Project Name	Project Number	Preservative								Preservative Key
WastAway Analysis	808-14-01									0. None
Report To	Report CC									1. HCl
Karl Seltzer	kseitzer@kooglerassociates.com									2. HNO3
Company/Address										3. H2O4
Koogler + Associates, Inc										4. NaOH
4014 NW 13th Street Gainsville, FL 32609										5. Zn. Acetate
Phone #	FAX #									6. MeOH
352-377-5822										7. NaHSO4
Sampler's Signature	Sampler's Printed Name									8. Other
										REMARKS
CLIENT SAMPLE ID	LAB ID	SAMPLING DATE	SAMPLING TIME	Matrix						
WAW	WAW	3/17	var.	solid						
WAW	WAW	3/18	var.	solid						
WAW	WAW	3/19	var.	solid						
WAW	WAW	3/21	var.	solid						
WAW	WAW	3/24	var.	solid						
WAW	WAW	3/26	var.	solid						
WAW	WAW	3/27	var.	solid						
Special Instructions/Comments:										
Lab analysis and sample prep detailed to Jerry Allen										
Turnaround Requirements										REPORT REQUIREMENTS
Rush (Surcharge apply)										I. Results Only
STANDARD										II. Results - GC Summaries
REQUESTED REPORT DATE										III. GC, CUP, MS/MID as required
REQUESTED FAX DATE										IV. Results - GC and Calibration Summary
Received By										Entered By
Signature	Received by	Signature	Received By							
Printed Name	Printed Name	Printed Name	Printed Name	Printed Name	Printed Name	Printed Name	Printed Name	Printed Name	Printed Name	Signature
ROBERT S. PAST	Leisa Brock	Leisa Brock	Leisa Brock	Leisa Brock	Leisa Brock	Leisa Brock	Leisa Brock	Leisa Brock	Leisa Brock	Signature
Firm	WASTAWAY	Bouldin & Dawson	Signature							
Date/Time	4/1/14 3:00pm	4/1/14 4:20pm	4/2/14 8:00am	Date/Time						
										Date/Time



ALS Environmental Services
9143 Philips Highway, Suite 200
Jacksonville, FL 32256
Tel 904-739-2277
Fax 904-739-2011

Appendix A

Subcontracted Analytical Results



April 24, 2014

Client: Koogler and Associates, Inc.
4014 NW 13th Street
Gainesville, FL 32609-1923
Attn: Karl Seltzer
Project: WasteAway Analysis

April 8, 2014

Certificate of Analysis

Sample ID:	Sample Date & Time:	Lab #:	Moisture, Total wt%	Volatile Matter		Fixed Carbon		Ash	
				D7582 Proximate by Automated TGA System					
				As Received wt%	Moist. Free wt%	As Received wt%	Moist. Free wt%	As Received wt%	Moist. Free wt%
WAW	3/17/14 0000	J1402484-001	2.12	75.73	77.37	7.27	7.42	14.88	15.20
WAW	3/18/14 0000	J1402484-002	1.92	74.80	76.27	8.48	8.64	14.80	15.09
WAW	3/19/14 0000	J1402484-003	1.74	76.67	78.03	8.64	8.79	12.94	13.17
WAW	3/21/14 0000	J1402484-004	1.64	76.13	77.40	7.74	7.87	14.50	14.74
WAW	3/24/14 0000	J1402484-005	2.64	73.94	75.94	7.62	7.83	15.80	16.23
WAW	3/26/14 0000	J1402484-006	2.38	74.02	75.82	8.37	8.57	15.24	15.61
WAW	3/27/14 0000	J1402484-007	2.89	72.46	74.62	8.12	8.36	16.53	17.02
Average			2.19	74.82	76.49	8.03	8.21	14.96	15.30
Std Deviation			0.47	1.47	1.18	0.50	0.51	1.12	1.21

Note:

Total Moisture is based on analysis of As Received samples that have not been frozen and ground. Approximately 10 g of sample was analyzed for Total Moisture by drying at 105°C under vacuum overnight.



April 24, 2014

Client: Koogler and Associates, Inc.
4014 NW 13th Street
Gainesville, FL 32609-1923

Attn: Karl Seltzer

Project: WasteAway Analysis

April 8, 2014

Certificate of Analysis

Sample ID:	Sample Date & Time:	Lab #:	Carbon	Hydrogen	Nitrogen	Oxygen	Sulfur	Heating Value
			D5373 Moist. Free wt%	D5373 Moist. Free wt%	D5373 Moist. Free wt%	D5373 mod Moist. Free wt%	D4239 Moist. Free wt%	D5865 As Received BTU/lb
WAW	3/17/14 0000	J1402484-001	49.81	6.50	0.97	27.57	0.242	8,516
WAW	3/18/14 0000	J1402484-002	45.60	5.94	1.02	31.43	0.217	8,327
WAW	3/19/14 0000	J1402484-003	51.14	6.55	0.91	32.73	0.196	8,554
WAW	3/21/14 0000	J1402484-004	50.21	6.42	0.99	36.03	0.194	8,638
WAW	3/24/14 0000	J1402484-005	49.23	6.31	1.02	33.19	0.195	7,997
WAW	3/26/14 0000	J1402484-006	47.53	6.12	1.00	30.04	0.207	8,335
WAW	3/27/14 0000	J1402484-007	48.58	6.22	0.98	33.87	0.207	8,052
Average			48.87	6.30	0.98	32.12	0.21	8,345
Std Deviation			1.85	0.22	0.04	2.75	0.02	247
								217

Note:

Sample Preparation for Proximate and Ultimate Analyses - The entire sample was ground to < 2mm using a tungsten carbide knife mill after freezing the sample with liquid nitrogen. A 1/4 sub-sample was taken after mixing the < 2mm sample. The sub-sample was refrozen with liquid nitrogen and ground to <1mm. This step was performed twice. The < 1mm sample was then divided into three sub-samples - one for fuel testing in Tucson, one for ALS Jacksonville, and one for ALS Rochester.

A residual moisture was measured and used to calculate the Proximate and Ultimate values on a Moisture Free basis. The As Received value were calculated using the Total Moisture values.

Wendy Hyatt, Project Chemist